# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

COMMWORKS SOLUTIONS, LLC,

Plaintiff,

v.

MEDIATEK INC.,

Defendant.

Civil Action No. 2:24-cv-00701

JURY TRIAL DEMANDED

#### COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff CommWorks Solutions, LLC ("CommWorks" or "Plaintiff") files this complaint against MediaTek Inc., ("MediaTek" or "Defendant") alleging, based on its own knowledge as to itself and its own actions, and based on information and belief as to all other matters, as follows:

### **NATURE OF THE ACTION**

1. This is a patent infringement action for Defendant's infringement of the following United States Patents (collectively, the "Asserted Patents"), issued by the United States Patent and Trademark Office ("USPTO"):

	Patent No.	Title	Reference
1.	7,177,285	Time Based Wireless Access Provisioning	https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/7177285,
			https://patentcenter.uspto.gov/applications/10961959
2.	7,463,596	Time Based Wireless Access Provisioning	https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/7463596,
			https://patentcenter.uspto.gov/applications/11673513
3.	7,911,979	Time Based Access Provisioning System And Process	https://image-ppubs.uspto.gov/dirsearch- public/print/downloadPdf/7911979, https://patentcenter.uspto.gov/applications
			/12323399

	Patent No.	Title	Reference
4.	RE44,904	Method For Contention Free Traffic Detection	https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/RE44904,
			https://patentcenter.uspto.gov/applications/ /13171882
5.	7,027,465	Method For Contention Free Traffic Detection	https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/7027465,
			https://patentcenter.uspto.gov/applications/ /10167986
6.	6,891,807	Time Based Wireless Access Provisioning	https://image-ppubs.uspto.gov/dirsearch-public/print/downloadPdf/6891807,
			https://patentcenter.uspto.gov/applications/ /10341847

2. Plaintiff seeks monetary damages.

#### **PARTIES**

- 3. CommWorks is a limited liability company formed under the laws of the State of Georgia with its registered office address located in Alpharetta, Georgia (Fulton County).
- 4. On information and belief, Defendant MediaTek Inc. is a corporation organized and existing under the laws of Taiwan, and located at No. 1, Dusing Road 1, Hsinchu Science Park, Hsinchu City 30078, Taiwan.
- 5. On information and belief, Defendant has directly and/or indirectly developed, designed, manufactured, distributed, marketed, offered to sell and/or sold infringing products and services in the United States, including in the Eastern District of Texas, and otherwise directs infringing activities to this District in connection with their products and services as set forth in this Complaint.

#### **JURISDICTION AND VENUE**

6. CommWorks repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety.

7. This is an action for infringement of a United States patent arising under 35 U.S.C. §§ 271, 281, and 284–85, among others. This Court has subject matter jurisdiction of the action under 28 U.S.C. § 1331 and § 1338(a).

- 8. Defendant is subject to this Court's specific and general personal jurisdiction under due process due at least to Defendant's substantial business in this judicial district, including: (i) at least a portion of the infringements alleged herein; (ii) regularly transacting, doing, and/or soliciting business, engaging in other persistent courses of conduct, or deriving substantial revenue from goods and services provided to individuals in Texas and in this District; and (iii) having an interest in, using or possessing real property in Texas.
- 9. Specifically, Defendant has done business in, and has committed acts of infringement in this District directly, through intermediaries, by contributing to and through its inducement of third parties, and offers its products or services, including those accused of infringement here, to customers and potential customers located in this District.
- 10. Defendant has purposefully directed infringing activities at residents of the State of Texas, and this litigation results from those infringing activities. Defendant regularly sells (either directly or indirectly), its products within this District. For example, upon information and belief, Defendant has placed its products into the stream of commerce *via* an established distribution channel with the knowledge or understanding that such products are being sold in this District and the State of Texas. Defendant is subject to this Court's specific and/or general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due to its substantial and pervasive business in this State and District, including its infringing activities alleged herein, from which Defendant derives substantial revenue from goods sold to residents and consumers.
  - 11. Defendant sells, offers for sale, uses, makes and/or imports products that are and have

been used, offered for sale, sold, and purchased in the Eastern District of Texas, and MediaTek Inc. has committed acts of infringement in the Eastern District of Texas, has conducted business in the Eastern District of Texas, and/or has engaged in continuous and systematic activities in the

Eastern District of Texas.

- 12. Under 28 U.S.C. §§ 1391(b)-(d) and 1400(b), venue is proper in this judicial district as to MediaTek Inc. at least because MediaTek Inc. is a foreign corporation subject to personal jurisdiction in this judicial district and has committed acts of infringement within this judicial district giving rise to this action.
- 13. Defendant commits acts of infringement from this District, including, but not limited to, the sale and use of the products identified below.
- 14. On information and belief, Defendant or Defendant's subsidiaries have physical facilities and employees in Texas, including an office at 2435 North Central Expressway, Suite 750, Richardson, Texas 75808.
- 15. On information and belief, Defendant or Defendant's subsidiaries maintain multiple offices in Texas and have numerous employees in Texas.
- 16. On information and belief, Defendant has authorized sellers and sales representatives that offer and sell products identified in this Complaint throughout the State of Texas, including in this Judicial District, and to consumers throughout this Judicial District.
- 17. Defendant has not contested proper venue and exercise of personal jurisdiction in this District for patent infringement actions. *See, e.g.*, Answer, ¶¶ 12-20, *Mosaid Techs. Inc. v. Mediatek Inc. et al.*, No. 2:23-cv-00129, ECF 24 (E.D. Tex. July 18, 2023); Answer, ¶¶ 11-13, *Am. Patents, LLC v. Mediatek Inc., et al.*, No. 4:22-cv-487, ECF 18 (E.D. Tex. Sept. 6, 2022).

#### THE ACCUSED PRODUCTS

- 18. CommWorks repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety.
- 19. Defendant uses, causes to be used, manufactures, provides, supplies, or distributes one or more MediaTek chips, MediaTek System-on-Chips (SoCs), and/or devices, including, but not limited to the "Accused Products," set forth below:
- MediaTek chips, MediaTek SoCs, and/or devices supporting Wi-Fi Protected Setup (WPS)
   functionality, including:
  - o MT7688 (including MT7628K, MT7628A);



MediaTek MT7688 Datasheet

#### 1. Overview

MediaTek MT7688 chipset integrates a 1T1R 802.11n Wi-Fi radio, a 580MHz MIPS® 24KEc<sup>™</sup> CPU, 1-port fast Ethernet PHY, USB2.0 host, PCIe, SD-XC, I2S/PCM and multiple low-speed IOs in a single SOC. The MT7688 supports two operation modes — IoT gateway and IoT device mode. In IoT gateway mode, the PCIe interface can connect to an 802.11ac chipset and be used as an 11ac dual-band concurrent gateway. The high-performance USB 2.0 allows MT7688 to add 3G/LTE modem support or a H.264 ISP for wireless IP camera. The IoT gateway mode also supports touch panel and Bluetooth Low Energy, Zigbee/Z-Wave and Sub-1 GHz RF for smart home control. In IoT device mode, MT7688 supports eMMC, SD-XC and USB 2.0 in addition to Wi-Fi high quality audio via 192Kbps/24bits I2S interface and VoIP application through PCM, as well as peripheral interfaces including PWM, SPI slave, 3<sup>rd</sup> UART and more GPIOs.

- Green AP/STA
  - Intelligent Clock Scaling (exclusive)
  - DDRII: ODT off, Self-refresh mode
- QoS: WMM, WMM-PS
- 16 Multiple BSSID
- iPA/iLNA and ePA/eLNA
- 24 STA-Proxy
- AES128/256-CBC
- WEP64/128, TKIP, AES, WPA, WPA2, WAPI
- WPS: PBC, PIN
- AP/STA Firmware: Linux 2.6.36 SDK, OpenWrt 3.10 SDK, eCOS with IPv6

Figure 1A-B (Source: MT7688 Datasheet, MediaTek, Apr. 2016, p. 7).

#### MT7628 (including MT7628A, MT7628D, MT7628K, MT7628N, MT7628DAN);

#### Overview

The MT7628 router-on-a-chip includes an 802.11n MAC and baseband, a 2.4 GHz radio and FEM, a 580 MHz MIPS® 24K™ CPU core, a 5-port 10/100 fast ethernet switch. The MT7628 includes everything needed to build an AP router from a single chip. The embedded high performance CPU can process advanced applications effortlessly, such as routing, security and VoIP. The MT7628 also includes a selection of interfaces to support a variety of applications, such as a USB port for accessing external storage.

# Applications:

- NAS devices
- Dual band concurrent routers

#### **Features**

- Embedded MIPS24KEc (580 MHz) with 64 KB I-Cache and 32 KB D-Cache
- 2T2R 2.4 GHz with 300 Mbps PHY data rate
- Legacy 802.11b/g and HT 802.11n modes
- 20/40 MHz channel bandwidth
- Legacy 802.11b/g and HT 802.11n modes
- Reverse Data Grant (RDG)
- Maximal Ratio Combining (MRC)
- Space Time Block Coding (STBC)
- MCM 8 Mbytes DDR1 KGD (MT7628KN)
- 16-bit DDR1/2 up to 128/256 Mbytes (MT7628NN/KN)
- SPI/SD-XC/eMMC
- x1 USB 2.0 Host, x1 PCle Root Complex

- 5-port 10/100 FE PHY
- Internet Of Thing
- An optimized PMU
- Green AP
  - Intelligent Clock Scaling (exclusive)
  - DDRII: ODT off, Self-refresh mode
- I2C, I2S, SPI, PCM, UART, JTAG, GPIO
- 16 Multiple BSSID
- WEP64/128, TKIP, AES, WPA, WPA2, WAPI
- QoS: WMM, WMM-PS
- WPS: PBC, PIN
- Voice Enterprise: 802.11k+r
- AP Firmware: Linux 2.6 SDK, eCOS with IPv6

Figure 2 (Source: MT7628 Datasheet, MediaTek, 2014, p. 2).

o MT7620 (including MT7620A, MT7620D, MT7620N); and

#### Overview

The MT7620 router-on-a-chip includes an 802.11n MAC and baseband, a 2.4 GHz radio and FEM, a 580 MHz MIPS® 24K™ CPU core, a 5-port 10/100 switch and two RGMII. The MT7620 includes everything needed to build an AP router from a single chip. The embedded high performance CPU can process advanced applications effortlessly, such as routing, security and VoIP. The MT7620 also includes a selection of interfaces to support a variety of applications, such as a USB port for accessing external storage.

## Applications:

- Routers
- NAS devices
- iNICs
- Dual band concurrent routers

- Embedded MIPS24KEc (580 MHz) with 64 KB I-Cache and 32 KB D-Cache
- 2T2R 2.4 GHz with 300 Mbps PHY data rate
- Legacy 802.11b/g and HT 802.11n modes
- 20/40 MHz channel bandwidth
- Legacy 802.11b/g and HT 802.11n modes
- Reverse Data Grant (RDG)
- Maximal Ratio Combining (MRC)
- Space Time Block Coding (STBC)
- 16-bit SDRAM up to 64 Mbytes
- 16-bit DDR1/2 up to 128/256 Mbytes (MT7620A)
- SPI, NAND Flash/SD-XC
- 1x USB 2.0, 1x PCle host/device
- 5-port 10/100 SW and two RGMII

- An optimized PMU
- Green AP
  - Intelligent Clock Scaling (exclusive)
  - DDRII: ODT off, Self-refresh mode
  - SDRAM: Pre-charge power down
- I2C, I2S, SPI, PCM, UART, JTAG, MDC, MDIO, GPIO
- Hardware NAT with IPv6 and 2 Gbps wired speed
- 16 Multiple BSSID
- WEP64/128, TKIP, AES, WPA, WPA2, WAPI
- QoS: WMM, WMM-PS
- WPS: PBC, PIN
- Voice Enterprise: 802.11k+r
- AP Firmware: Linux 2.6 SDK, eCOS with IPv6
- RGMII iNIC Driver: Linux 2.4/2.6

Figure 3 (Source: MT7620 Datasheet, MediaTek, 2013-17, p. 2).

- MediaTek chips, MediaTek System SoCs, and/or devices supporting Wi-Fi Multimedia
   (WMM) and 802.11-2007+ functionality, including:
  - o **MT7921** (including MT7921LEN, MT7621A)<sup>1</sup>; and

# System overview

#### 1.1 General Description

MT7921 is highly integrated single chip which features a low power 2x2 11a/b/g/n/ac/ax dual-band Wi-Fi subsystem and a Bluetooth subsystem. The Wi-Fi subsystem contains the 802.11a/b/g/n/ac/ax radio, baseband, and MAC that are designed to meet both the low power and high throughput application, and 32-bit RISC MCU to handle Wi-Fi tasks. The Bluetooth subsystem contains the Bluetooth radio, baseband, link controller, and 32-bit RISC MCU for Bluetooth protocols.

#### 1.2.4 WLAN

- IEEE 802.11 a/b/g/n/ac/ax compliant
- Support 20MHz/40MHz bandwidth in 2.4GHz band and 20/40/80M bandwidth in 5GHz band
- MT7921 supports MU-MIMO RX and DBDC (dual band dual concurrent)
- MT7920 supports MU-MIMO RX
- Support STBC, LDPC, TX Beamformer and RX Beamformee
- Greenfield, mixed mode, legacy modes support
- IEEE 802.11 d/e/h/i/j/k/mc/r/v/w support
- Security support for WFA WPA/WPA2 personal, WPS2.0, WAPI
- QoS support of WFA WMM, WMM PS
- Integrated LNA, PA, and T/R switch
- Optional external LNA and PA support.

Figure 4A–C (Source: MT7921LEN Product Brief)

- MediaTek chips, MediaTek System SoCs, and/or devices supporting Wi-Fi Protected Setup
   ("WPS") compatible consumer electronics chips functionality, including:
  - o MT7922<sup>2</sup>; and

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<sup>&</sup>lt;sup>1</sup> See <a href="https://mediatek-marketing.files.svdcdn.com/production/documents/MT7921LEN-Product Brief">https://mediatek-marketing.files.svdcdn.com/production/documents/MT7921LEN-Product Brief</a> 202308.pdf.

<sup>&</sup>lt;sup>2</sup> See <a href="https://www.mediatek.com/blog/mediatek-wifi-6-solutions-achieve-wi-fi-alliance-wpa3-r3-certification">https://www.mediatek.com/blog/mediatek-wifi-6-solutions-achieve-wi-fi-alliance-wpa3-r3-certification</a>; see also <a href="https://www.mediatek.com/products/broadband-wifi/mediatek-filogic-330">https://www.mediatek.com/products/broadband-wifi/mediatek-filogic-330</a>.

#### $\circ$ MT7921<sup>3</sup>;

# MediaTek Wi-Fi 6 Solutions achieve Wi-Fi Alliance WPA3 R3 certification

Sep 1, 2021 Technology

MediaTek Wi-Fi 6 solutions: MT7921 and MT7922 series' have passed the latest <u>WPA3 R3 security certification set by the Wi-Fi Alliance</u>. MediaTek Wi-Fi 6 solutions were also selected by the Wi-Fi Alliance to become the test bed platform for its WPA3 Certification Program. This follows the <u>MediaTek Wi-Fi 6E platforms that were previously</u> selected for the Wi-Fi Alliance Wi-Fi 6E Certification Program.

WPA3 is the latest security certification required to provide secure networks, and includes WPA3-Personal and WPA3-Enterprise wireless networking environments.

MediaTek Wi-Fi 6 solutions fully support the IEEE802.11i security standard and are compliant with NIST FIPS 140-2 for government level security requirement.

The supported Wi-Fi Alliance security features include:

- Wi-Fi Protected Setup™
- Protected Management Frames
- WPA™-Enterprise

<u>Figure 5</u> (Source: MediaTek Blog, MediaTek Wi-Fi 6 Solutions achieve Wi-Fi Alliance WPA3 R3 certification (Sept. 1, 2021))

- 20. On information and belief, Defendant provides information and assistance to its customers to enable them to use the Accused Products in an infringing manner as described below.
- 21. For these reasons and the additional reasons detailed below, the Accused Products practice at least one claim of each of the Asserted Patents.
- 22. By a letter dated March 5, 2021 addressed to Mr. Smith Huang, Assistant General Manager, for MediaTek, Inc. (the "Notice Letter"), Defendant received notice of the Asserted

<sup>&</sup>lt;sup>3</sup> See <a href="https://www.mediatek.com/blog/mediatek-wifi-6-solutions-achieve-wi-fi-alliance-wpa3-r3-certification">https://www.mediatek.com/blog/mediatek-wifi-6-solutions-achieve-wi-fi-alliance-wpa3-r3-certification</a>; See also <a href="https://www.mediatek.com/products/home-networking/mt7621">https://www.mediatek.com/products/home-networking/mt7621</a>.

Patents and its infringement of CommWorks's patents, including the Asserted Patents.

# COUNT I: <u>INFRINGEMENT OF U.S. PATENT NO. 7,177,285</u>

23. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

24. The USPTO duly issued U.S. Patent No. 7,177,285 (the "'285 patent") on February 13, 2007, after full and fair examination of Application No. 10/961,959 which was filed October 8, 2004. The '285 patent is entitled "Time Based Wireless Access Provisioning."

25. CommWorks owns all substantial rights, interest, and title in and to the '285 patent, including the sole and exclusive right to prosecute this action and enforce the '285 patent against infringers and to collect damages for all relevant times.

26. CommWorks or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '285 patent.

27. The claims of the '285 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting network provisioning systems. The written description of the '285 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

28. For example, at the time of the invention, wireless access to data networks was not yet conventional. Then existent systems for provisioning access to a network were impractical, such

as for wireless devices which lacked a user interface configured for communicating provisioning information, or for simple home-based intranets, such as a wireless picture frame device lacking a control interface to read or extract identification information, such as a MAC address, to facilitate wireless access provisioning. '285 Patent at col. 3:13-26. Further, wireless devices that did have a dedicated user interface were incapable of, or cumbersome in, communicating device identification and exchanging provisioning information, still requiring a user to be technically proficient to properly initiate and complete a provisioning process. *Id.* at col. 3:27-36.

29. The invention of the '285 Patent improved upon existent network provisioning systems by enabling provisioning without requiring a user interface for the initiation of a provisioning process—"a major technological advance." *Id.* at col. 3:37-41. The invention of the '285 Patent further improved upon existent provisioning systems by providing a wireless access provisioning structure and process with minimal device requirements and/or user proficiency, whereby a wireless device is readily provisioned by the provisioning system, and whereby other unauthorized devices within an access region are prevented from being provisioned by the provisioning system. *Id.* at col. 3:42-49. The invention of the '285 Patent further improved upon existent provisioning systems by providing a time-based wireless access provisioning system integrated with easily monitored parameters of a wireless device, such as the time monitoring of power on and/or start of signal transmission, for provisioning secure encrypted communication. Id. at col. 3:50-58. Moreover, the structure of the devices described in the '285 Patent was not conventional at the time of the invention. Specifically, a device such as an access point, comprising a provisioning activation button, time-based provisioning logic, access control list, wired network logic, a wired network connection and a transceiver were not conventional (or even available) at the time of the invention.

30. Defendant has directly infringed the '285 patent by making, using, offering to sell, selling, and/or importing Accused Products identified above.

31. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '285 patent, as detailed in **Exhibit A** to this Complaint (Evidence of Use Regarding U.S. Patent No. 7,177,285).

32. On information and belief, Defendant has infringed the '285 Patent pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing into the United States Wi-Fi Protected Setup ("WPS") compatible SoCs and/or devices, such as, for example, the MediaTek MT7688 SoC (included in the "Accused Products").

- 33. For example, as detailed in Exhibit A, Defendant has infringed at least claim 1 of the '285 Patent by making, using, offering to sell, selling, and/or importing the Accused Products, which perform a process for provisioning between a wireless device and a network. *See* Exhibit A. The process for provisioning comprises the step of tracking an operating parameter of the wireless device within a service area, wherein the operating parameter of the wireless device comprises an onset of a signal transmission of the wireless device. *Id.* The process for provisioning further comprises the step of initiating provisioning of the wireless device if the tracked operating parameter occurs within a time interval. *Id.*
- 34. Defendant has also indirectly infringed the '285 patent by inducing others to directly infringe the '285 patent. Defendant has induced distributors and end-users, including, but not limited to, Defendant's employees, partners, contractors, or customers, to directly infringe, either literally or under the doctrine of equivalents, the '285 patent by providing or requiring use of the Accused Products. Defendant has taken active steps, directly or through contractual relationships

with others, with the specific intent to cause them to use the Accused Products in a manner that

infringes one or more claims of the '285 patent, including, for example, claim 1 of the '285 patent.

Such steps by Defendant include, among other things, advising or directing personnel, contractors,

or end-users to use the Accused Products in an infringing manner; advertising and promoting the

use of the Accused Products in an infringing manner; or distributing instructions that guide users

to use the Accused Products in an infringing manner. Defendant has performed these steps, which

constitute induced infringement with the knowledge of the '285 patent and with the knowledge

that the induced acts constitute infringement. Defendant has been aware that the normal and

customary use of the Accused Products by others would infringe the '285 patent.

35. Defendant has also indirectly infringed by contributing to the infringement of the '285

patent. Defendant has contributed to the direct infringement of the '285 patent by its personnel,

contractors, distributors, and customers. The Accused Products have special features that are

specially designed to be used in an infringing way and that have no substantial uses other than

ones that infringe one or more claims of the '285 patent, including, for example, claim 1 of the

'285 patent. The special features constitute a material part of the invention of one or more of the

claims of the '285 patent and are not staple articles of commerce suitable for substantial non-

infringing use.

36. Defendant had knowledge of the '285 patent at least as early as Defendant's receipt of

the Notice Letter.

37. Furthermore, on information and belief, Defendant has a policy or practice of not

reviewing the patents of others, including instructing its employees to not review the patents of

others, and thus has been willfully blind of CommWorks's patent rights.

38. Defendant's actions are at least objectively reckless as to the risk of infringing a valid

patent and this objective risk was either known or should have been known by Defendant.

39. Defendant's direct infringement of the '285 patent has been willful, intentional,

deliberate, or in conscious disregard of CommWorks's rights under the patent.

40. CommWorks has been damaged as a result of the infringing conduct by Defendant

alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for

such infringements, which by law cannot be less than a reasonable royalty, together with interest

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

COUNT II: <u>INFRINGEMENT OF U.S. PATENT NO. 7,463,596</u>

41. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though

fully set forth in their entirety.

42. The USPTO duly issued U.S. Patent No. 7,463,596 (the "'596 patent") on December

9, 2008, after full and fair examination of Application No. 11/673,513, which was filed on

February 9, 2007. The '596 patent is entitled "Time Based Wireless Access Provisioning."

43. CommWorks owns all substantial rights, interest, and title in and to the '596 patent,

including the sole and exclusive right to prosecute this action and enforce the '596 patent against

infringers and to collect damages for all relevant times.

44. CommWorks or its predecessors-in-interest have satisfied all statutory obligations

required to collect pre-filing damages for the full period allowed by law for infringement of the

'596 patent.

45. The claims of the '596 patent are not directed to an abstract idea and are not limited to

well-understood, routine, or conventional activity. Rather, the claimed inventions include

inventive components that improve upon the function and operation of preexisting network

provisioning systems.

46. The written description of the '596 patent describes in technical detail each limitation

of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-

conventional and non-generic combination of claim limitations is patently distinct from and

improved upon what may have been considered conventional or generic in the art at the time of

the invention.

47. For example, at the time of the invention, wireless access to data networks was not yet

conventional. Then existent systems for provisioning access to a network were impractical, such

as for wireless devices which lacked a user interface configured for communicating provisioning

information, or for simple home-based intranets, such as a wireless picture frame device lacking a

control interface to read or extract identification information, such as a MAC address, to facilitate

wireless access provisioning. '596 Patent at col. 3:13-26. Further, wireless devices that did have

a dedicated user interface were incapable of, or cumbersome in, communicating device

identification and exchanging provisioning information, still requiring a user to be technically

proficient to properly initiate and complete a provisioning process. *Id.* at col. 3:27-36.

48. The invention of the '596 Patent improved upon existent network provisioning

systems by enabling provisioning without requiring a user interface for the initiation of a

provisioning process—"a major technological advance." *Id.* at col. 3:37-41. The invention of the

'596 Patent further improved upon existent provisioning systems by providing a wireless access

provisioning structure and process with minimal device requirements and/or user proficiency,

whereby a wireless device is readily provisioned by the provisioning system, and whereby other

unauthorized devices within an access region are prevented from being provisioned by the

provisioning system. *Id.* at col. 3:42-49. The invention of the '596 Patent further improved upon

existent provisioning systems by providing a time-based wireless access provisioning system

integrated with easily monitored parameters of a wireless device, such as the time monitoring of

power on and/or start of signal transmission, for provisioning secure encrypted communication.

Id. at col. 3:50-58. Moreover, the structure of the devices described in the '596 Patent was not

conventional at the time of the invention. Specifically, a device such as an access point,

comprising a provisioning activation button, time-based provisioning logic, access control list,

wired network logic, a wired network connection and a transceiver were not conventional (or even

available) at the time of the invention.

49. Defendant has directly infringed the '596 patent by making, using, offering to sell,

selling, and/or importing the Accused Products identified above.

50. Defendant has directly infringed, either literally or under the doctrine of equivalents,

at least claim 1 of the '596 patent, as detailed in **Exhibit B** to this Complaint (Evidence of Use

Regarding U.S. Patent No. 7,463,596).

51. On information and belief, Defendant has infringed the '596 Patent pursuant to 35

U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, offering for sale,

selling, and/or importing into the United States Wi-Fi Protected Setup ("WPS") compatible SoCs

and/or devices, such as, for example, the MediaTek MT7688 SoC (included in the "Accused

Products").

52. For example, as detailed in Exhibit B, Defendant, using the Accused Products, has

infringed at least claim 1 of the '596 Patent by making, using, offering to sell, selling, and/or

importing the Accused Products, which perform a process for associating devices. See Exhibit B.

The process for associating devices comprises the step of tracking an operating parameter of a first

device, wherein the operating parameter of the first device comprises any of a power on of the first

device, and an onset of a signal transmission of the first device. *Id.* The process for associating

devices further comprises the step of automatically associating the first device with at least one

other device if the tracked operating parameter occurs within a time interval. *Id.* 

53. Defendant has also indirectly infringed the '596 patent by inducing others to directly

infringe the '596 patent. Defendant has induced distributors and end-users, including, but not

limited to, Defendant's employees, partners, contractors, or customers, to directly infringe, either

literally or under the doctrine of equivalents, the '596 patent by providing or requiring use of the

Accused Products. Defendant has taken active steps, directly or through contractual relationships

with others, with the specific intent to cause them to use the Accused Products in a manner that

infringes one or more claims of the '596 patent, including, for example, claim 1 of the '596 patent.

Such steps by Defendant include, among other things, advising or directing personnel, contractors,

or end-users to use the Accused Products in an infringing manner; advertising and promoting the

use of the Accused Products in an infringing manner; or distributing instructions that guide users

to use the Accused Products in an infringing manner. Defendant has performed these steps, which

constitute induced infringement with the knowledge of the '596 patent and with the knowledge

that the induced acts constitute infringement. Defendant has been aware that the normal and

customary use of the Accused Products by others would infringe the '596 patent.

54. Defendant has also indirectly infringed by contributing to the infringement of the '596

patent. Defendant has contributed to the direct infringement of the '596 patent by its personnel,

contractors, distributors, and customers. The Accused Products have special features that are

specially designed to be used in an infringing way and that have no substantial uses other than

ones that infringe one or more claims of the '596 patent, including, for example, claim 1 of the

'596 patent. The special features constitute a material part of the invention of one or more of the

claims of the '596 patent and are not staple articles of commerce suitable for substantial non-

infringing use.

55. Defendant had knowledge of the '596 patent at least as early as Defendant's receipt of

the Notice Letter.

56. Furthermore, on information and belief, Defendant has a policy or practice of not

reviewing the patents of others, including instructing its employees to not review the patents of

others, and thus has been willfully blind of CommWorks's patent rights.

57. Defendant's actions are at least objectively reckless as to the risk of infringing a valid

patent and this objective risk was either known or should have been known by Defendant.

58. Defendant's direct infringement of the '596 patent has been willful, intentional,

deliberate, or in conscious disregard of CommWorks's rights under the patent.

59. CommWorks has been damaged as a result of the infringing conduct by Defendant

alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for

such infringements, which by law cannot be 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. 7,911,979

60. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though

fully set forth in their entirety.

61. The USPTO duly issued U.S. Patent No. 7,911,979 (the "'979 patent") on March 22,

2011, after full and fair examination of Application No. 12/323,399 which was filed on November

25, 2008. The '979 patent is entitled "Time Based Access Provisioning System And Process." A

Certificate of Correction was issued on July 19, 2011.

62. CommWorks owns all substantial rights, interest, and title in and to the '979 patent,

including the sole and exclusive right to prosecute this action and enforce the '979 patent against

infringers and to collect damages for all relevant times.

63. CommWorks or its predecessors-in-interest have satisfied all statutory obligations

required to collect pre-filing damages for the full period allowed by law for infringement of the

'979 patent.

64. The claims of the '979 patent are not directed to an abstract idea and are not limited to

well-understood, routine, or conventional activity. Rather, the claimed inventions include

inventive components that improve upon the function and operation of preexisting network

provisioning systems.

65. The written description of the '979 patent describes in technical detail each limitation

of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-

conventional and non-generic combination of claim limitations is patently distinct from and

improved upon what may have been considered conventional or generic in the art at the time of

the invention.

66. For example, at the time of the invention wireless access to data networks was not yet

conventional. Then existent systems for provisioning access to a network were impractical, such

as for wireless devices which lacked a user interface configured for communicating provisioning

information, or for simple home-based intranets, such as a wireless picture frame device lacking a

control interface to read or extract identification information, such as a MAC address, to facilitate

wireless access provisioning. '979 Patent at col. 3:19-31. Further, wireless devices that did have

a dedicated user interface were incapable of, or cumbersome in, communicating device

identification and exchanging provisioning information, still requiring a user to be technically

proficient to properly initiate and complete a provisioning process. *Id.* at col. 3:32-41.

67. The invention of the '979 Patent improved upon existent network provisioning

systems by enabling provisioning without requiring a user interface for the initiation of a provisioning process—"a major technological advance." *Id.* at col. 3:42-46. The invention of the '979 Patent further improved upon existent provisioning systems by providing a wireless access provisioning structure and process with minimal device requirements and/or user proficiency, whereby a wireless device is readily provisioned by the provisioning system, and whereby other unauthorized devices within an access region are prevented from being provisioned by the provisioning system. *Id.* at col. 3:47-53. The invention of the '979 Patent further improved upon existent provisioning systems by providing a time-based wireless access provisioning system integrated with easily monitored parameters of a wireless device, such as the time monitoring of power on and/or start of signal transmission, for provisioning secure encrypted communication. Id. at col. 3:54-62. Moreover, the structure of the devices described in the '979 Patent was not conventional at the time of the invention. Specifically, a device such as an access point, comprising a provisioning activation button, time-based provisioning logic, access control list, wired network logic, a wired network connection and a transceiver were not conventional (or even available) at the time of the invention.

- 68. Defendant has directly infringed the '979 patent by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing Accused Products identified above.
- 69. Defendant has directly infringed either literally or under the doctrine of equivalents, at least claim 1 of the '979 patent, as detailed in **Exhibit C** to this Complaint (Evidence of Use Regarding U.S. Patent No. 7,911,979).
- 70. On information and belief, Defendant has infringed the '979 Patent pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, offering for sale,

selling, and/or importing into the United States Wi-Fi Protected Setup ("WPS") compatible SoCs and/or devices, such as, for example, the MT7688 SoC (included in the "Accused Products").

- 71. For example, as detailed in Exhibit C, Defendant, using the Accused Products, has infringed at least claim 1 of the '979 patent by making, using, offering to sell, selling, and/or importing the Accused Products, which perform a provisioning process performed by a provisioning system having provisioning logic. *See* Exhibit C. The provisioning process performed comprises tracking, by the provisioning logic, an operating parameter of a first device, wherein the operating parameter of the first device comprises any of a power on of the first device, and an onset of a signal transmission of the first device. *Id.* The provisioning process performed in the Accused Products further comprises sending a signal to initiate provisioning of the first device with a network if the tracked operating parameter occurs within a designated time interval. *Id.*
- 72. Defendant has also indirectly infringed the '979 patent by inducing others to directly infringe the '979 patent. Defendant has induced distributors and end-users, including, but not limited to, Defendant's employees, partners, contractors, or customers, to directly infringe, either literally or under the doctrine of equivalents, the '979 patent by providing or requiring use of the Accused Products. Defendant has taken active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '979 patent, including, for example, claim 1 of the '979 patent. Such steps by Defendant include, among other things, advising or directing personnel, contractors, or end-users to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner. Defendant has performed these steps, which

constitute induced infringement with the knowledge of the '979 patent and with the knowledge

that the induced acts constitute infringement. Defendant has been aware that the normal and

customary use of the Accused Products by others would infringe the '979 patent.

73. Defendant has also indirectly infringed by contributing to the infringement of the '979

patent. Defendant has contributed to the direct infringement of the '979 patent by its personnel,

contractors, distributors, and customers. The Accused Products have special features that are

specially designed to be used in an infringing way and that have no substantial uses other than

ones that infringe one or more claims of the '979 patent, including, for example, claim 1 of the

'979 patent. The special features constitute a material part of the invention of one or more of the

claims of the '979 patent and are not staple articles of commerce suitable for substantial non-

infringing use.

74. Defendant had knowledge of the '979 patent at least as early as Defendant's receipt of

the Notice Letter.

75. Furthermore, on information and belief, Defendant has a policy or practice of not

reviewing the patents of others, including instructing its employees to not review the patents of

others, and thus has been willfully blind of CommWorks's patent rights.

76. Defendant's actions are at least objectively reckless as to the risk of infringing a valid

patent and this objective risk was either known or should have been known by Defendant.

77. Defendant's direct infringement of the '979 patent has been willful, intentional,

deliberate, or in conscious disregard of CommWorks's rights under the patent.

78. CommWorks has been damaged as a result of the infringing conduct by Defendant

alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for

such infringements, which by law cannot be 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. RE44,904**

- 79. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.
- 80. The USPTO duly and lawfully reissued U.S. Patent No. RE44,904 (the "'904 patent") on May 20, 2014. The '904 patent is entitled "Method For Contention Free Traffic Detection."
- 81. CommWorks owns all substantial rights, interest, and title in and to the '904 patent, including the sole and exclusive right to prosecute this action and enforce the '904 patent against infringers and to collect damages for all relevant times.
- 82. CommWorks or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '904 patent.
- 83. The claims of the '904 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting network provisioning systems.
- 84. The written description of the '904 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.
- 85. For example, at the time of the invention, "conventionally ... transmission differentiation based on priority was not conducted at all." '904 Patent at col. 2:9-10. Obtaining

priority information for traffic transmitted through an Access Point (AP) required searching all fields in all frames for indications of the priority state of the actual data frame, resulting in all fields in all frames being checked and all headers being analyzed, starting from the outer most headers, until the right field in the header had been found. *Id.* at col. 1:63-2:2. This measure was very complex, took a long time, and required a large amount of processing, especially for complex tunneling protocols. *Id.* at col. 2:5-8. All the frame headers and protocols which can be included in the data frames transmitted via the network had to be known, hence, the amount of information needed for identifying the data was huge. *Id.* at col. 2:8-14. Such a huge amount of information was typically too heavy to handle in small and low price equipment like WLAN access points (AP). *Id.* Further, then existing systems according to the IEEE 802.11 standard did not separate traffic based on priority. *Id.* at col. 2:20-25.

86. The invention of the '904 Patent improved upon conventional network traffic routing systems by providing methods by which priority traffic can easily be distinguished from normal traffic without the need of complex processing making it possible to execute in a low cost and possibly low performance AP. *Id.* at col. 2:29-32, 3:2-4, 3:52-53. The methods of the invention of the '904 Patent further improved upon conventional network traffic routing systems by easily finding higher priority traffic from the stream of MAC layer frames without necessarily requiring knowledge of the upper layer protocols. *Id.* at col. 2:62-65. The methods of the invention of the '904 Patent further improved upon conventional network traffic routing systems by being protocol-independent and flexible such that their configuration may be done in an external configuration program; with the Access Point not needing to know anything about the processed traffic; further alleviating the need of complex structure of the device. *Id.* at col. 3:5-8, 3:14-21. A further advantage over conventional network traffic routing systems is that installation of new software

or hardware in the network element would not be required when new protocols or modified protocols are introduced in the network. *Id.* at col. 3:22-31.

- 87. Defendant has directly infringed the '904 patent by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing Accused Products identified above.
- 88. Defendant has directly infringed either literally or under the doctrine of equivalents, at least claim 1 of the '904 patent, as detailed in **Exhibit D** to this Complaint (Evidence of Use Regarding U.S. Patent No. RE44,904).
- 89. On information and belief, Defendant, using the Accused Products, has infringed the '904 Patent pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by performing methods for contention free traffic detection using Wi-Fi Multimedia ("WMM") and/or 802.11-2007+ compatible chips, such as, for example, the MT7921 chips (included in the "Accused Products").
- 90. For example, as detailed in Exhibit D, Defendant, using the Accused Products, has infringed at least claim 1 of the '904 patent by performing a method comprising extracting a bit pattern from a predetermined position in a frame. *See* Exhibit D. The method further comprises comparing said extracted bit pattern with a search pattern. *Id.* The method further comprises identifying a received frame as a priority frame in case said extracted bit pattern matches with said search pattern. *Id.* The method further comprises forwarding said received frame to a high priority queue in case said frame is detected to be a high priority frame during a special period for sending priority traffic. *Id.* The method further comprises adjusting the duration of the special period for sending priority traffic according statistic information regarding sent priority frames. *Id.*
- 91. Defendant had knowledge of the '904 patent at least as early as Defendant's receipt of the Notice Letter.

- 92. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others, including instructing its employees to not review the patents of others, and thus has been willfully blind of CommWorks's patent rights.
- 93. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.
- 94. Defendant's direct infringement of the '904 patent has been willful, intentional, deliberate, or in conscious disregard of CommWorks's rights under the patent.
- 95. CommWorks has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for such infringements, which by law cannot be 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. 7,027,465

- 96. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.
- 97. The USPTO duly issued U.S. Patent No. 7,027,465 (the "'465 patent") on April 11, 2006, after full and fair examination of Application No. 10/167,986 which was filed on June 11, 2002. The '465 patent is entitled "Method For Contention Free Traffic Detection."
- 98. CommWorks owns all substantial rights, interest, and title in and to the '465 patent, including the sole and exclusive right to prosecute this action and enforce the '465 patent against infringers and to collect damages for all relevant times.
- 99. CommWorks or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '465 patent.

100. The claims of the '465 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting network provisioning systems.

101. The written description of the '465 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

102. For example, at the time of the invention, "conventionally ... transmission differentiation based on priority was not conducted at all." '465 Patent at col. 2:9-10. Obtaining priority information for traffic transmitted through an Access Point (AP) required searching all fields in all frames for indications of the priority state of the actual data frame, resulting in all fields in all frames being checked and all headers being analyzed, starting from the outer most headers, until the right field in the header had been found. *Id.* at col. 1:53-59. This measure was very complex, took a long time, and required a large amount of processing, especially for complex tunneling protocols. *Id.* at col. 1:62-65. All the frame headers and protocols which can be included in the data frames transmitted via the network had to be known, hence, the amount of information needed for identifying the data was huge. *Id.* at col. 1:66-2:4. Such a huge amount of information was typically too heavy to handle in small and low price equipment like WLAN access points (AP). *Id.* Further, then existing systems according to the IEEE 802.11 standard did not separate traffic based on priority. *Id.* at col. 2:11-15.

103. The invention of the '465 Patent improved upon conventional network traffic routing

systems by providing methods by which priority traffic can easily be distinguished from normal traffic without the need of complex processing making it possible to execute in a low cost and possibly low performance AP. *Id.* at col. 2:19-23, 2:60-62, 3:43. The methods of the invention of the '465 Patent further improved upon conventional network traffic routing systems by easily finding higher priority traffic from the stream of MAC layer frames without necessarily requiring knowledge of the upper layer protocols. *Id.* at col. 2:53-56. The methods of the invention of the '465 Patent further improved upon conventional network traffic routing systems by being protocol-independent and flexible such that their configuration may be done in an external configuration program; with the Access Point not needing to know anything about the processed traffic; further alleviating the need of complex structure of the device. *Id.* at col. 2:63-66, col. 3:5-11. A further advantage over conventional network traffic routing systems is that installation of new software or hardware in the network element would not be required when new protocols or modified protocols are introduced in the network. *Id.* at col. 3:12-21.

- 104. Defendant has directly infringed the '465 patent by importing, selling, manufacturing, offering to sell, using, providing, supplying, or distributing Accused Products identified above.
- 105. Defendant has directly infringed either literally or under the doctrine of equivalents, at least claim 1 of the '465 patent, as detailed in **Exhibit E** to this Complaint (Evidence of Use Regarding U.S. Patent No. 7,027,465).
- 106. On information and belief, Defendant, using the Accused Products, has infringed the '465 patent pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by performing methods for contention free traffic detection using Wi-Fi Multimedia (WMM) and/or 802.11-2007+ compatible chips and devices, such as, for example, the MT7921 chips (included in the "Accused Products").

107. For example, as detailed in Exhibit E, Defendant has infringed at least claim 1 of the

'465 patent by performing a method for detecting priority of data frames in a network. See Exhibit

E. The method for detecting priority of data frames comprises the step of extracting a bit pattern

from a predetermined position in a frame. *Id.* The method for detecting priority of data frames

further comprises the step of comparing said extracted bit pattern with a search pattern. *Id.* The

method for detecting priority of data frames further comprises the step of identifying a received

frame as a priority frame in case said extracted bit pattern matches with said search pattern. *Id.* In

the method for detecting priority of data frames, the predetermined position in said frame is defined

by the offset of said bit pattern in said frame. *Id*.

108. Defendant had knowledge of the '465 patent at least as early as Defendant's receipt of

the Notice Letter.

109. Furthermore, on information and belief, Defendant has a policy or practice of not

reviewing the patents of others, including instructing its employees to not review the patents of

others, and thus has been willfully blind of CommWorks's patent rights.

110. Defendant's actions are at least objectively reckless as to the risk of infringing a valid

patent and this objective risk was either known or should have been known by Defendant.

111. Defendant's direct infringement of the '465 patent has been willful, intentional,

deliberate, or in conscious disregard of CommWorks's rights under the patent.

112. CommWorks has been damaged as a result of the infringing conduct by Defendant

alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for

such infringements, which by law cannot be 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. 6,891,807

113. CommWorks repeats and re-alleges the allegations in the Paragraphs above as though

fully set forth in their entirety.

114. The USPTO duly issued U.S. Patent No. 6,891,807 (the "'807 patent") on May 10,

2005, after full and fair examination of Application No. 10/341,847 which was filed on January

13, 2003. The '807 patent is entitled "Time Based Wireless Access Provisioning."

115. CommWorks owns all substantial rights, interest, and title in and to the '807 patent,

including the sole and exclusive right to prosecute this action and enforce the '807 patent against

infringers and to collect damages for all relevant times.

116. CommWorks or its predecessors-in-interest have satisfied all statutory obligations

required to collect pre-filing damages for the full period allowed by law for infringement of the

'807 patent.

117. The claims of the '807 patent are not directed to an abstract idea and are not limited to

well-understood, routine, or conventional activity. Rather, the claimed inventions include

inventive components that improve upon the function and operation of preexisting network

provisioning systems.

118. The written description of the '807 patent describes in technical detail each limitation

of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-

conventional and non-generic combination of claim limitations is patently distinct from and

improved upon what may have been considered conventional or generic in the art at the time of

the invention.

119. For example, at the time of the invention, wireless access to data networks was not yet

conventional. Then existent systems for provisioning access to a network were impractical, such

as for wireless devices which lacked a user interface configured for communicating provisioning

information, or for simple home-based intranets, such as a wireless picture frame device lacking a control interface to read or extract identification information, such as a MAC address, to facilitate wireless access provisioning. '807 Patent at col. 3:5-18. Further, wireless devices that did have a dedicated user interface were incapable of, or cumbersome in, communicating device identification and exchanging provisioning information, still requiring a user to be technically proficient to properly initiate and complete a provisioning process. *Id.* at col. 3:19-28.

120. The invention of the '807 Patent improved upon existent network provisioning systems by enabling provisioning without requiring a user interface for the initiation of a provisioning process—"a major technological advance." *Id.* at col. 3:29-33. The invention of the '807 Patent further improved upon existent provisioning systems by providing a wireless access provisioning structure and process with minimal device requirements and/or user proficiency, whereby a wireless device is readily provisioned by the provisioning system, and whereby other unauthorized devices within an access region are prevented from being provisioned by the provisioning system. *Id.* at col. 3:34-41. The invention of the '807 Patent further improved upon existent provisioning systems by providing a time-based wireless access provisioning system integrated with easily monitored parameters of a wireless device, such as the time monitoring of power on and/or start of signal transmission, for provisioning secure encrypted communication. Id. at col. 3:42-50. Moreover, the structure of the devices described in the '807 Patent was not conventional at the time of the invention. Specifically, a device such as an access point, comprising a provisioning activation button, time-based provisioning logic, access control list, wired network logic, a wired network connection and a transceiver were not conventional (or even available) at the time of the invention.

121. Defendant has directly infringed either literally or under the doctrine of equivalents,

at least claim 17 of the '807 patent, as detailed in **Exhibit F** to this Complaint (Evidence of Use

Regarding U.S. Patent No. 6,891,807).

122. On information and belief, Defendant has infringed the '807 Patent pursuant to 35

U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, offering for sale,

selling, and/or importing into the United States Wi-Fi Protected Setup ("WPS") compatible

consumer electronics chips, such as, for example, the MediaTek MT7922 chips (included in the

"Accused Products").

123. For example, as detailed in Exhibit F, Defendant has infringed at least claim 17 of the

'807 Patent by making, using, offering to sell, selling, and/or importing the Accused Products,

which include a time based network access provisioning system between a wireless device and a

network. See Exhibit F. The time based network access provisioning system comprises a network

access point connected to the network, the network access point comprising logic for tracking

operation of the wireless device. *Id.* The time based network access provisioning system further

comprises logic for provisioning the wireless device if the operation of the wireless device occurs

within an activatable time interval. *Id*.

124. Defendant had knowledge of the '807 patent at least as early as Defendant's receipt of

the Notice Letter.

125. Furthermore, on information and belief, Defendant has a policy or practice of not

reviewing the patents of others, including instructing its employees to not review the patents of

others, and thus has been willfully blind of CommWorks's patent rights.

126. Defendant's actions are at least objectively reckless as to the risk of infringing a valid

patent and this objective risk was either known or should have been known by Defendant.

- 127. Defendant's direct infringement of the '807 patent has been willful, intentional, deliberate, or in conscious disregard of CommWorks's rights under the patent.
- 128. CommWorks has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to CommWorks in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **JURY DEMAND**

129. CommWorks hereby requests a trial by jury on all issues so triable by right.

#### **PRAYER FOR RELIEF**

- 130. CommWorks requests that the Court find in its favor and against Defendant, and that the Court grant CommWorks the following relief:
  - Judgment that one or more claims of each of the Asserted Patents has been infringed,
     either literally or under the doctrine of equivalents, by Defendant or others acting in
     concert therewith;
  - b. An award of a reasonable ongoing royalty for infringement of the Asserted Patents by such entities;
  - c. Judgment that Defendant account for and pay to CommWorks all damages to and costs incurred by CommWorks because of Defendant's infringing activities and other conduct complained of herein;
  - d. Judgment that Defendant's infringements of the Asserted Patents be found willful, and that the Court award treble damages for the period of such willful infringement pursuant to 35 U.S.C. § 284;
  - e. Pre-judgment interest on the damages caused by Defendant's infringing activities and

other conduct complained of herein;

- f. That this Court declare this an exceptional case and award CommWorks its reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and
- g. All other and further relief as the Court may deem just and proper under the circumstances.

Dated: August 27, 2024 Respectfully submitted,

By:/s/ James F. McDonough, III

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# Attorneys for Plaintiff COMMWORKS SOLUTIONS, LLC

\* Admitted to the Eastern District of Texas

# **List of Exhibits**

- A. Evidence of Use Regarding U.S. Patent No. 7,177,285
- B. Evidence of Use Regarding U.S. Patent No. 7,463,596
- C. Evidence of Use Regarding U.S. Patent No. 7,911,979
- D. Evidence of Use Regarding U.S. Patent No. RE44,904
- E. Evidence of Use Regarding U.S. Patent No. 7,027,465
- F. Evidence of Use Regarding U.S. Patent No. 6,891,807