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

GENERAL ACCESS SOLUTIONS, LTD.,	
Plaintiff,	Civil Action No.
v.	
XIAOMI, INC.,	JURY TRIAL DEMANDED
Defendant.	

# **COMPLAINT FOR PATENT INFRINGEMENT**

General Access Solutions, LTD ("GAS" or "Plaintiff") for its Complaint against Defendant Xiaomi, Inc. ("Xiaomi" or "Defendant") alleges the following:

#### **NATURE OF THE ACTION**

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

#### **THE PARTIES**

- 2. Plaintiff GAS is a domestic limited partnership organized under the laws of the State of Texas with a place of business in Dallas, TX 75219. GAS (formerly known as "Access Solutions, Ltd.") purchased the assets and assumed the liabilities of Raze Technologies, Inc. (see below), which had an office at 2540 Plano Pkwy Suite 188 Plano TX 75074. Further, GAS maintained storage facilities for documents and equipment at 2560 Kathryn Lane Plano TX, 75025.
- 3. Upon information and belief, Xiaomi is a corporation organized and existing under the laws of China, with a place of business at Huarun Wucaicheng Office Building, No. 68, Qinghe (M) Street, Hai, Beijing, Beijing, 100085 China.

4. Upon information and belief, Defendant sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

# JURISDICTION AND VENUE

- 5. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.
  - 6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 7. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, Defendant conducts business in this District, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.
- 8. On information and belief, Defendant is subject to this Court's general and specific personal jurisdiction because Defendant has sufficient minimum contacts within the State of Texas and this District, pursuant to due process and/or the Texas Long Arm Statute because Defendant purposefully availed itself of the privileges of conducting business in the State of Texas and in this District, because Defendant regularly conducts and solicits business within the State of Texas and within this District, and because Plaintiff's causes of action arise directly from Defendant's business contacts and other activities in the State of Texas and this District.

#### **BACKGROUND**

9. Around the year 2000, several major wireless carriers implemented "3G" (third-generation wireless technology) wireless networks that were primarily designed around voice services. Around that time, anticipating the future increasing demand for wireless data services

(e.g., email, internet browsing, application downloads, and video services) in the wireless industry, WestEnd Broadband worked in earnest on research and development of next generation wireless communications networks.

- 10. In 2000-2001, WestEnd Broadband, Inc., a Texas corporation, changed its name to Raze Technologies, Inc. In or around December 2001, Access Solutions, Ltd. and a related entity purchased the assets and assumed the liabilities of Raze Technologies, Inc. and provided all of the startup capital for a new company, Raze Technologies, Inc., a Delaware Company. Access Solutions, Ltd. subsequently underwent a name change in 2011 to General Access Solutions, Ltd., ("GAS").
- 11. Continuing the work of WestEnd Broadband, Inc., the Raze entities (collectively "RAZE") continued to pioneer the development of wireless telecommunications equipment, sometimes referred to as "4G" networks, which would accommodate voice and broadband data services as well as provide heightened reliability and Quality of Service (QOS). In the years 2000-2002, RAZE successfully designed, developed, built and tested 4G wireless networks in Texas.
- 12. As part of that effort, on April 20, 2001, a number of patent applications were filed of behalf of inventors including Paul Struhsaker, Robert R. Nelson, and Russell C. McKown, among others. One of those applications, 09/839,499, led to U.S. Patent No. 9,225,555 ("the '555 patent"), the subject of the present complaint.
- 13. On information and belief, 4G networks provide increased bandwidth and throughput and are noticeably faster with respect to data services than 3G networks. At the time RAZE was developing its 4G technology, however, the available spectrum necessary to implement 4G networks was limited and owned by entities that were not positioned to invest and

deploy this technology. For instance, several wireless carriers owned licenses for spectrums in the 2500-2700 MHz range, which is suitable for 4G networking.

14. On information and belief, at the time RAZE was developing its 4G technology, the major wireless carriers were reluctant to invest in 4G technology before realizing a return on their investments in 3G technology and infrastructure. Transitioning to 4G technology required significant infrastructure improvements relative to earlier technologies. Additionally, the public's demand for both data and voice services was not evident to the major wireless carriers because "smartphones," such as the immensely popular iPhone and later Android phones, which have both high-speed data and voice functionality, had yet to be introduced to the public.

## COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,225,555

- 15. The allegations set forth in the foregoing paragraphs 1 through 14 are incorporated into this First Claim for Relief.
- 16. On December 29, 2015, the '555 patent entitled "WIRELESS

  COMMUNICATION SYSTEM AND DEVICE FOR COUPLING A BASE STATION AND

  MOBILE STATIONS" was duly and legally issued by the United States Patent and Trademark

  Office. A true and correct copy of the '555 patent is attached as Exhibit 1.
- 17. Plaintiff is the assignee and owner of the right, title and interest in and to the '555 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them. Upon information and belief, Defendant has and continues to directly infringe at least claim 1 of the '555 patent by making, using, selling, importing and/or providing and causing to be used a wireless communication system, including a base station, a plurality of transceivers that are coupled to each other, and a plurality of mobile stations (e.g., smartphones, tablets, etc.) that wirelessly communicate with the transceivers and

the base station (the "Accused Instrumentalities"). Specifically, the Accused Instrumentalities include but are not limited to the Xiaomi Mi 5, Xiaomi Mi Max, Xiaomi Rdmi Note 3, Xiaomi Mi 4i, Xiaomi Mi Note, and the Xiaomi Redmi 3.

- 18. Claim 1 of the '555 patent generally recites a wireless communication device comprising a first transceiver in direct communication with a terrestrial base station. The terrestrial base station communicates with several wireless communication devices. Additionally, the wireless communication device includes a second transceiver in direct wireless broadband communication with several computing devices located within a coverage area of the second transceiver. The second transceiver is coupled to the first transceiver. The first transceiver within the wireless communication device receives a first signal from the base station intended for a first computing device. Further, the second transceiver determines signal characteristics of the first computing device, and the second transceiver transmits the first signal to the first computing device based on the determined signal characteristics of the first computing device. The second transceiver then receives a second signal intended for the base station from the first computing device. Finally, the first transceiver transmits the second signal to the base station. The Accused Instrumentalities infringe claim 1 of the '555 patent. Specifically, the Accused Instrumentalities include a wireless communication device, such as a smartphone, tablet and/or dedicated wifi hotspot device with mobile hotspot functionality. (See e.g., http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)
- 19. The mobile hotspot device (smartphone/tablet) includes a transceiver that communicates with a cellular tower in a mobile cellular provider's network. (*See e.g.*, http://www.phonearena.com/phones/compare/Xiaomi-Mi-5,Xiaomi-Mi-4/phones/9055,8777.)

  This cellular tower communicates with a plurality of wireless communication devices. (*See e.g.*,

http://www.rcrwireless.com/20140513/network-infrastructure/lte/lte-network-architecture-diagram.) The mobile hotspot device includes a second transceiver that communicates via a wireless broadband communication protocol (e.g., WiFi 802.11 connectivity) with a plurality of computing devices, such as other smartphones/tablets, laptops, personal computer, etc., when these computing devices are within a given range of the second transceiver. (*See e.g.*, http://www.phonearena.com/phones/compare/Xiaomi-Mi-5,Xiaomi-Mi-4/phones/9055,8777.)

20. Additionally, the two transceivers within the mobile hotspot device operate to provide connectivity between the plurality of computing devices and the base station. Specifically, the first transceiver relays the communication signal from the cellular tower to the second transceiver. The second transceiver then transmits this communication signal to the computing devices that are within a given range of the second transceiver via a WiFi 802.11 communication protocol. (*See e.g.*, http://www.phonearena.com/phones/compare/Xiaomi-Mi-5,Xiaomi-Mi-4/phones/9055,8777; http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.* 

http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22:

http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf.)

21. These remote computing devices transmit a communication signal via a WiFi 802.11 communication protocol to the second transceiver within the mobile hotspot device. This signal is then transmitted to the cellular tower (base station). (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.* http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-

series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22: http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf.)

- 22. The second wireless local area network transceiver determines signal characteristics of the first computing device, and the second transceiver transmits the first signal to the first computing device based on the determined signal characteristics of the first computing device. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomiredmi-phones-miui7/; *see also e.g.* IEEE St. 802.11-2012; *see also e.g.* http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22: http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf.)
- 23. Claim 6 of the '555 patent generally recites the wireless communication device of claim 1, further comprising an AC power supply and a battery power supply.
- 24. The Accused Instrumentalities infringe claim 6 of the '555 patent. Specifically, the wireless communication device (e.g., smartphone, laptop, or tablet) comprises an AC power supply and a battery power supply. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)
- 25. Claim 9 of the '555 patent generally recites the wireless communication device of claim 1, wherein the first signal comprises data traffic from the Internet.
- 26. The Accused Instrumentalities infringe claim 9 of the '555 patent. Specifically, the first signal transmitted from the second transceiver via the 802.11 Wi-Fi protocol to the mobile hotspot device (smartphone/tablet) comprises data traffic from the internet. (*See e.g.*,

http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.* IEEE St. 802.11-2012; *see also e.g.*,

http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22:

http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf.)

- 27. Claim 10 of the '555 patent generally recites the wireless communication device of claim 1, wherein the second signal comprises data traffic to be sent to the Internet.
- 28. The Accused Instrumentalities infringe claim 10 of the '555 patent. Specifically, the second signal transmitted from the second transceiver to the terrestrial base station (cellular tower) comprises data traffic to be sent to the Internet via the 802.11 Wi-Fi protocol. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.* Cisco document pg. 22.)
- 29. Claim 11 of the '555 patent generally recites a wireless communication system comprising a first wireless communication device (e.g., smartphone, laptop, or tablet) in direct wireless communication with a base station (e.g., cellular tower) and a plurality of computing devices (e.g., smartphone, laptop, or tablet). The first wireless communication device comprises a first transceiver coupled to a first antenna. The first transceiver communicates via wireless communication, such as radio signals, with a terrestrial base station that is in direct wireless communication with several wireless communication devices. The first wireless communication device is one of the plurality of the wireless communication devices. Additionally, the first wireless communication device includes a second transceiver coupled to a second antenna. The second transceiver communicates directly via broadband signals with the referenced computing

devices. Moreover, the second transceiver is coupled to the first transceiver. In the first wireless communication device, the first transceiver receives a first signal from the base station that is intended for a first computing device of the plurality of computing devices. Further, the second transceiver determines signal characteristics of the first computing device, and the second transceiver transmits the first signal to the first computing device based on the determined signal characteristics of the first computing device. The second transceiver then receives a second signal intended for the base station from the first computing device. Finally, the first transceiver transmits the second signal to the base station.

- 30. The Accused Instrumentalities infringe claim 11 of the '555 patent. Specifically, the Accused Instrumentalities include a mobile cellular network (wireless communication system), comprising a first wireless communication device, such as a smartphone, laptop, or tablet with mobile hotspot functionality, in direct wireless communication with a base station (e.g., cellular tower) and a plurality of computing devices (e.g., smartphone, laptop, or tablet). (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)
- 31. Further, the first wireless communication device comprises a first transceiver coupled to a first antenna. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.) The first transceiver communicates via wireless communication, such as radio signals, with a terrestrial base station that is in direct wireless communication with several wireless communication devices. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)
- 32. Additionally, the mobile hotspot device (smartphone/tablet) includes a second transceiver that is coupled to a second antenna. The second transceiver communicates via wireless broadband communication protocol (WiFi 802.11 connectivity) with a plurality of

computing devices, such as other smartphones/tablets, when these computing devices are within a given range of the second transceiver. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.) Moreover, the second transceiver is coupled to the first transceiver.

- 33. The first transceiver receives a first signal from the base station that is intended for a first computing device of the plurality of computing devices. Further, the second transceiver determines signal characteristics of the first computing device, and the second transceiver transmits the first signal to the first computing device based on the determined signal characteristics of the first computing device. The second transceiver then receives a second signal intended for the base station from the first computing device. Finally, the first transceiver transmits the second signal to the base station. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.* IEEE St. 802.11-2012; *see also e.g.*, http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22:
- 34. Claim 16 of the '555 patent generally recites the wireless communication system of claim 11, wherein the wireless communication device further comprises an AC power supply and a battery power supply.
- 35. The Accused Instrumentalities infringe claim 16 of the '555 patent. Specifically, the wireless communication device (e.g., smartphone, laptop, or tablet) comprises an AC power supply and a battery power supply. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)

- 36. Claim 19 of the '555 patent generally recites the wireless communication system of claim 11, wherein the first signal comprises data traffic from the Internet.
- 37. The Accused Instrumentalities infringe claim 19 of the '555 patent. Specifically, the first signal transmitted from the second transceiver via the 802.11 Wi-Fi protocol to the mobile hotspot device (smartphone/tablet) comprises data traffic from the internet. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/; *see also e.g.*, IEEE St. 802.11-2012; *see also e.g.* http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf; *see also e.g.* Cisco document pg. 22: http://www.cisco.com/c/en/us/products/collateral/wireless/aironet-3600-series/white\_paper\_c11-713103.pdf.)
- 38. Claim 20 of the '555 patent generally recites the wireless communication system of claim 11, wherein the second signal comprises data traffic to be sent to the Internet.
- 39. The Accused Instrumentalities infringe claim 20 of the '555 patent. Specifically, the second signal transmitted from the second transceiver to the terrestrial base station (cellular tower) comprises data traffic to be sent to the Internet via the 802.11 Wi-Fi protocol. (*See e.g.*, http://xiaomiadvices.com/setup-enable-portable-hotspot-xiaomi-redmi-phones-miui7/.)
- 40. On information and belief, the Accused Instrumentalities are marketed, provided to, and/or used by or for Defendant's partners, clients, customers and end users across the country and in this District.
- 41. Defendant was made aware of the '555 patent and its infringement thereof at least as of the filing and/or service of this Complaint.

- 42. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim of the '555 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of at least one claim of the '555 patent.
- 43. In particular, Defendant's actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the Accused Instrumentalities and providing instruction materials, training, and services regarding the Accused Instrumentalities. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Defendant has had actual knowledge of the '555 patent and knowledge that its acts were inducing infringement of the '555 patent since at least the date Defendant received notice that such activities infringed the '555 patent.
- 44. Upon information and belief, Defendant is liable as a contributory infringer of the '555 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States Wifi hotspot capable technology to be especially made or adapted for use in an infringement of the '555 patent. The Accused Instrumentalities are a material component for use in practicing the '555 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.
  - 45. Plaintiff has been harmed by Defendant's infringing activities.

#### **JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

## PRAYER FOR RELIEF

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

- A. An adjudication that Defendant has infringed the '555 patent;
- B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '555 patent, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and
- D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

DATED: December 2, 2016 DEVLIN LAW FIRM LLC

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