IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INTELLECTUAL VENTURES I LLC,

Plaintiff,

v.

AT&T MOBILITY LLC; AT&T MOBILITY II LLC; NEW CINGULAR WIRELESS SERVICES, INC.,

Defendants,

and

ERICSSON INC. AND TELEFONAKTIEBOLAGET LM ERICSSON,

Intervenors.

Civil Action No. 13-1668-LPS

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT

Pursuant to the Court's Order dated September 8, 2014 (D.I. 41), Plaintiff
Intellectual Ventures I LLC ("Intellectual Ventures I"), for its First Amended Complaint against
Defendants AT&T Mobility LLC (d/b/a AT&T Mobility); AT&T Mobility II LLC (d/b/a AT&T
Mobility); New Cingular Wireless Services, Inc. (d/b/a AT&T Mobility) (AT&T Mobility LLC,
AT&T Mobility II LLC, and New Cingular Wireless Services, Inc. collectively, "AT&T"),
hereby alleges the following:

PARTIES

- 1. Intellectual Ventures I is a Delaware limited liability company with its principal place of business located in Bellevue, Washington.
- 2. Defendant AT&T Mobility, LLC, formerly named Cingular Wireless, LLC, is a Delaware limited liability company and a wholly-owned subsidiary of AT&T, Inc., with its principal place of business at 5565 Glenridge Connector, Atlanta, Georgia 30342. AT&T Mobility, LLC does business under at least the name AT&T Mobility.
- 3. Defendant AT&T Mobility II, LLC, formerly named Cingular Wireless II, LLC, is a Delaware limited liability company and a wholly-owned subsidiary of AT&T, Inc., with its principal place of business at 5565 Glenridge Connector, Suite 1700, Atlanta, GA 30342. AT&T Mobility II, LLC does business under at least the name AT&T Mobility.
- 4. Defendant New Cingular Wireless Services, Inc., formerly named AT&T Wireless Services Inc., is a Delaware company and a wholly-owned subsidiary of AT&T, Inc., with its principal place of business at 7277 164th Avenue NE, Redmond, WA 98052-7823. New Cingular Wireless Services, Inc. does business under at least the name AT&T Mobility. Defendants AT&T Mobility LLC, AT&T Mobility II LLC, and New Cingular Wireless Services, Inc. shall be referred to collectively as "AT&T Mobility." On information and belief, all three of the companies doing business as AT&T Mobility have overlapping or shared legal departments and/or services. Therefore, notice to one company constitutes notice to all AT&T Mobility companies.

NATURE OF THE ACTION

5. This is a civil action alleging infringement of U.S. Patent No. 6,640,248; U.S. Patent No. 5,602,831; U.S. Patent No. 6,023,783; and US Patent No. 6,952,408 (the "Patents-in-Suit"), under the U.S. Patent Laws, 35 U.S.C. § 1 et seq.

JURISDICTION AND VENUE

- 6. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the U.S. patent laws, including 35 U.S.C. § 271 et seq.
- 7. This Court has personal jurisdiction over AT&T because AT&T has committed infringing acts in this District in violation of 35 U.S.C. § 271, and has participated in the sale, advertising, marketing, and use of wireless cellular equipment and services, within the State of Delaware and this District, that infringe the Patents-in-Suit. These acts have caused and continue to cause injury to Intellectual Ventures I within the District. AT&T derives substantial revenue from the sale of infringing services and products distributed within the District, and/or expects or should reasonably expect its actions to have consequences within the District, and derives substantial revenue from interstate and international commerce.
- 8. AT&T maintains places of business within the District from which it sells products or services to residents of the District. Additionally, AT&T provides telecommunications services to customers through base stations, switching equipment and other components of their telecommunications networks, which are located in the District.
- 9. Further, AT&T Mobility LLC; AT&T Mobility II LLC; and New Cingular Wireless Services, Inc. are each subject to this Court's jurisdiction by virtue of their

incorporation or formation in Delaware and their availing themselves of the laws and protections of this District.

10. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b).

THE PATENTS-IN-SUIT

- 11. Paragraphs 1-10 are reincorporated by reference as if fully set forth herein.
- 12. On October 28, 2003, the United States Patent and Trademark Office ("PTO") issued U.S. Patent No. 6,640,248 ("the '248 Patent"), titled "Application-aware, Quality of Service (QoS) Sensitive, Media Access Control (MAC) Layer." The '248 Patent is attached hereto as Exhibit A.
- 13. Intellectual Ventures I owns all substantial right, title, and interest in the '248 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.
- 14. On February 11, 1997, the PTO issued U.S. Patent No. 5,602,831 ("the '831 Patent"), titled "Optimizing Packet Size to Eliminate Effects of Reception Nulls." The '831 Patent is attached hereto as Exhibit B.
- 15. Intellectual Ventures I owns all substantial right, title, and interest in the '831 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.
- 16. On February 8, 2000, the PTO issued U.S. Patent No. 6,023,783 ("the '783 Patent"), titled "Hybrid Concatenated Codes and Iterative Decoding." The '783 Patent is attached hereto as Exhibit C.

- 17. Intellectual Ventures I is the exclusive licensee who possesses all substantial right, title, and interest in the '783 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.
- 18. On October 4, 2005, the PTO issued U.S. Patent No. 6,952,408 ("the '408 Patent"), titled "Method of Baseband Frequency Hopping Utilizing Time Division Multiplexed Mapping Between a Radio Transceiver and Digital Signal Processing Resources." The '408 Patent is attached hereto as Exhibit D.
- 19. Intellectual Ventures I owns all substantial right, title, and interest in the '408 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

FACTUAL BACKGROUND

Intellectual Ventures

- 20. Intellectual Ventures Management, LLC ("Intellectual Ventures") was founded in 2000. Since its founding, Intellectual Ventures has been deeply involved in the business of invention. Intellectual Ventures creates inventions and files patent applications for those inventions; it collaborates with others to develop and patent inventions; and it acquires and licenses patents from individual inventors, universities, and other institutions. A significant aspect of Intellectual Ventures' business is managing plaintiff Intellectual Ventures I.
- 21. Intellectual Ventures' business includes purchasing important inventions from individual inventors and institutions, and then licensing the inventions to those who need them.

Through this business, Intellectual Ventures enables inventors to reap a financial reward from their innovations, which is often a difficult task for individual inventors.

- 22. Intellectual Ventures also develops its own inventions. Intellectual Ventures has a staff of scientists and engineers who develop ideas in a broad range of fields, including agriculture, computer hardware, life sciences, medical devices, semiconductors, and software. Intellectual Ventures has invested millions of dollars developing such ideas and has filed hundreds of patent applications on its inventions every year, making it one of the top patent filers in the world. Intellectual Ventures also has invested in laboratory facilities to assist with the development and testing of new ideas.
- 23. Intellectual Ventures develops inventions by collaborating with inventors and research institutions around the world. For example, Intellectual Ventures has developed inventions by selecting a technical challenge, requesting proposals from inventors and institutions for inventions that would overcome the challenge, selecting the most promising ideas, rewarding the inventors and institutions for their contributions, and filing patent applications on the selected ideas. Intellectual Ventures has invested millions of dollars in this way and has created a network of more than 3000 inventors worldwide.

AT&T's Telecommunications Network

24. AT&T is in the business of providing wireless phone services to customers throughout the United States, including the state of Delaware. The future of AT&T's business and the subject of this lawsuit is AT&T's 4G Long Term Evolution ("LTE") wireless network.

- 25. AT&T is in the middle of one of the largest network build outs of all time. Since 2012, AT&T has been aggressively building out its 4G LTE network in a race against other telecommunication providers to gain market share in the United States. AT&T has launched 4G LTE service in over 400 markets in just the last 24 months. AT&T boasts that it has the nation's fastest and most reliable 4G LTE network and expects the network to cover approximately 300 million people in the United States and to be largely complete by the end of 2014. Three markets in Delaware, Dover, Sussex County and Wilmington have AT&T 4G LTE service and through the fruits of the inventions described in this complaint, AT&T is enjoying great success and earning tremendous profits.
- 26. AT&T has been enormously successful. As of June 30, 2013, AT&T had 107.9 million wireless subscribers, of which 35% had already converted to 4G LTE and over 17 million highly profitable and coveted smartphone users had converted to AT&T's 4G LTE service. AT&T heavily promotes its 4G LTE network as a selling point and as a differentiator against its competitors.
- 27. AT&T's ability to employ 4G LTE service is critical to its business. Due to substantial increases in the demand for wireless service in the United States, AT&T is facing spectrum and capacity constraints. The build out of AT&T's 4G LTE network is critical to driving down its cost of providing service, maintaining and growing its customer base and to the health of the company. AT&T has no other viable option than deploying 4G LTE.
- 28. Each passing day, AT&T adds to its LTE customer base by converting 3G customers to its 4G network and by taking customers from third parties who lack 4G LTE capabilities. Each passing day, AT&T also competes unfairly by using its substantial market

power and muscle to push aside competitors, which it can do because of its substantial financial resources and because it refuses to pay royalties for the patent rights necessary to legally employ its 4G LTE technology.

- 29. AT&T is aware that there are numerous patents in the LTE space, including patents owned by Intellectual Ventures I. Yet, upon information and belief, AT&T has no policy in place to obtain rights from patent holders to use their 4G LTE technology. Upon information and belief, this is by design, and AT&T employs a corporate policy of ignoring the risk of patent infringement and willfully infringing 4G LTE patents. In this fashion, AT&T has been able to keep its costs down and to compete unfairly against companies who lawfully take licenses to the patents in suit.
- 30. In this evolving marketplace, which is highly cost-competitive, a competitor who has lawfully taken a license to the patents in suit is operating under a competitive disadvantage to AT&T which refuses to pay for the accused technology. A damage award would be insufficient to vindicate the rights of Intellectual Ventures I and its current and future licensees, and to restore the market to the condition it would have been in had AT&T taken a license.

COUNT I

(AT&T's Infringement of the '248 Patent)

- 31. Paragraphs 1-30 are incorporated by reference as if fully restated herein.
- 32. AT&T has infringed the '248 Patent, literally and/or under the doctrine of equivalents, by using or performing one or more of the claims without authority and in violation of 35 U.S.C. § 271(a). Among the infringing services is AT&T's 4G LTE network services.

- 33. AT&T has had knowledge of the '248 patent since no later than November 8, 2005, when AT&T, or a predecessor, brought it to the attention of the examiner in an Information Disclosure Statement during prosecution of U.S. Patent No. 7,151,762. AT&T Corp. is the current assignee of U.S. Patent No. 7,151,762. In other words, AT&T's infringement has been willful and the Court should award treble damages pursuant to 35 U.S.C. § 284.
- 34. Intellectual Ventures I has suffered damage as a result of AT&T's infringement of the '248 Patent.

COUNT II

(AT&T's Infringement of the '831 Patent)

- 35. Paragraphs 1-34 are incorporated by reference as if fully restated herein.
- 36. AT&T has infringed the '831 Patent, literally and/or under the doctrine of equivalents, by using or performing one or more of the claims without authority and in violation of 35 U.S.C. § 271(a). Among the infringing services is AT&T's 4G LTE network services.
- 37. Intellectual Ventures I has suffered damage as a result of AT&T's infringement of the '831 Patent.

COUNT III

(AT&T's Infringement of the '783 Patent)

38. Paragraphs 1-37 are incorporated by reference as if fully restated herein.

- 39. AT&T has infringed the '783 Patent, literally and/or under the doctrine of equivalents, by using or performing one or more of the claims without authority and in violation of 35 U.S.C. § 271(a). Among the infringing services is AT&T's 4G LTE network services.
- 40. Intellectual Ventures I has suffered damage as a result of AT&T's infringement of the '783 Patent.

COUNT IV

(AT&T's Infringement of the '408 Patent)

- 41. Paragraphs 1-40 are incorporated by reference as if fully restated herein.
- 42. AT&T has infringed the '408 Patent, literally and/or under the doctrine of equivalents, by making, using or performing one or more of the claims without authority and in violation of 35 U.S.C. § 271(a). Among the infringing services are AT&T's cellular services, including, but not limited to, cellular services that implement LTE in wireless base stations.
- 43. Intellectual Ventures I has suffered damage as a result of AT&T's infringement of the '408 Patent.

PRAYER FOR RELIEF

WHEREFORE, Intellectual Ventures I respectfully requests the following relief:

- a) A judgment that U.S. Patent Nos. 6,640,248; 5,602,831; 6,023,783; and 6,952,408
 - b) A judgment that AT&T has infringed the '248 Patent;

- c) A judgment that AT&T's infringement of the '248 Patent was willful and that the damages shall be increased under 35 U.S.C. § 284 to three times the amount found or measured;
 - d) A judgment that AT&T has infringed the '831 Patent;
 - e) A judgment that AT&T has infringed the '783 Patent;
 - f) A judgment that AT&T has infringed the '408 Patent;
- g) An order enjoining AT&T and its officers, agents, servants and employees, privies, and all persons in active concert or participation with it, from further infringement of said patents;
- h) A judgment that Intellectual Ventures I be awarded all appropriate damages under 35 U.S.C. § 284 for AT&T's past infringement, and any continuing or future infringement of the Patents-in-Suit, up until the date such judgment is entered, including pre and post judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary to adequately compensate Intellectual Ventures I for AT&T's infringement, an accounting:
 - a. that this case be declared exceptional within the meaning of 35
 U.S.C. § 285 and that Intellectual Ventures I be awarded the reasonable attorneys' fees that they incur in prosecuting this action;
 - b. that Intellectual Ventures I be awarded costs and expenses that they incur in prosecuting this action; and
 - c. that Intellectual Ventures I be awarded such further relief at law or in equity as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Intellectual Ventures I hereby demands trial by jury on all claims and issues so triable.

DATED: September 26, 2014 Respectfully submitted,

FARNAN LLP

Of Counsel:

Martin J. Black DECHERT LLP Cira Centre 2929 Arch Street Philadelphia, PA 19104 (215) 994-4000 martin.black@dechert.com

Jeffrey B. Plies DECHERT LLP 300 W. 6th Street, Suite 2010 Austin, TX 78701 (512) 394-3000 jeffrey.plies@dechert.com

Stephen J. Akerley
Justin F. Boyce
DECHERT LLP
2440 W. El Camino Real Suite 700
Mountain View, CA 94040-1499
(650) 813-4800
stephen.akerley@dechert.com
justin.boyce@dechert.com

/s/ Brian E. Farnan

Joseph J. Farnan, III (Bar No. 3945) Brian E. Farnan (Bar No. 4089) 919 North Market Street, 12th Floor Wilmington, Delaware 19801 (302) 777-0300 (302) 777-0301 (Fax) bfarnan@farnanlaw.com

Counsel for Plaintiff Intellectual Ventures I LLC