

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

INDUSTRIAL TECHNOLOGY	§	Civil Action No. 2:15-cv-552-JRG
RESEARCH INSTITUTE,	§	
Plaintiff,	§	JURY TRIAL DEMANDED
	§	
v.	§	
	§	
LG ELECTRONICS, INC.,	§	
LG ELECTRONICS U.S.A., INC., and	§	
LG ELECTRONICS MOBILECOMM	§	
U.S.A., INC.,	§	
Defendants.	§	

PLAINTIFF’S SECOND AMENDED COMPLAINT

Plaintiff Industrial Technology Research Institute (“ITRI”), hereby complains of patent infringements by Defendants LG Electronics, Inc. (“LGE”), LG Electronics U.S.A., Inc. (“LGE-USA”), and LG Electronics MobileComm U.S.A., Inc. (“LGMP”), and alleges as follows:

The Parties

1. Plaintiff ITRI is the Republic of China, Taiwan’s scientific research institution having a principal address of 195, Section 4, Chung Hsing Road, Chutung, Hsinchu, Taiwan 31040, Republic of China.

2. On information and belief, Defendant LGE is a Korean corporation having its principal place of business at LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Korea, where it may be served with process via an officer, a managing or general agent, or any other agent authorized by appointment or by law to receive service of process.

3. On information and belief, Defendant LGE-USA is a Delaware corporation having its principal place of business at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey, 07362, where it may be served with process via an officer, a managing or general agent, or any

other agent authorized by appointment or by law to receive service of process. On information and belief, Defendant LGE-USA may also be served with process by serving its registered agent, United States Corporation Co., 211 East 7th Street, Suite 620, Austin, Texas 78701-3218. On information and belief, Defendant LGE-USA is a wholly-owned subsidiary of Defendant LGE.

4. On information and belief, Defendant LGMP is a California corporation having its principal place of business at 10101 Old Grove Road, San Diego, California 92131, where it may be served with process via an officer, a managing or general agent, or any other agent authorized by appointment or by law to receive service of process. On information and belief, Defendant LGMP may also be served with process by serving its registered agent, National Registered Agents, Inc., 16055 Space Center Boulevard, Suite 235, Houston, Texas 77062. On information and belief, Defendant LGMP conducts business as “LG Mobile Phones” and is a wholly-owned subsidiary of Defendant LGE-USA.

Jurisdiction and Venue

5. This action arises under the United States Patent Laws, 35 U.S.C. §§ 1 *et seq.* The Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

6. The Court has personal jurisdiction over Defendants because they have committed acts of patent infringement in the Eastern District of Texas in violation of 35 U.S.C. § 271, have offices in Texas, transact business in the Eastern District of Texas, have purposefully availed themselves of the privileges and benefits of the law of Texas, solicit customers in the State of Texas, and have customers who are residents of the State of Texas and the Eastern District of Texas and who use infringing instrumentalities made, used, offered for sale, sold, and imported by Defendants.

7. Venue is proper in the Eastern District of Texas under 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b).

The Patents-in-Suit

8. Plaintiff ITRI is the exclusive owner of all right, title, and interest in United States Patent No. 8,249,204 (“’204 patent”), titled “Apparatus and method for channel state information feedback,” which issued on August 21, 2012.

9. Plaintiff ITRI is the exclusive owner of all right, title, and interest in United States Patent No. 8,265,096 (“’096 patent”), titled “Method for constructing frame structures,” which issued on September 11, 2012.

10. Plaintiff ITRI is the exclusive owner of all right, title, and interest in United States Patent No. 8,279,812 (“’812 patent”), titled “Method and module for constructing a frame structure in communication systems,” which issued on October 2, 2012.

11. Plaintiff ITRI is the exclusive owner of all right, title, and interest in United States Patent No. 8,565,326 (“’326 patent”), titled “System and method for bit allocation and interleaving,” which issued on October 22, 2013.

The Accused Instrumentalities and Accused Devices

12. On information and belief, certain products and processes compliant with IEEE 802.11n, 802.11ac, and/or later standards practice an apparatus and method for channel state information feedback, method for constructing frame structures, and method and module for constructing a frame structure in communication systems called for by the ’204 patent, ’096 patent, and ’812 patent. The following is a non-exhaustive, exemplary list of Defendants’ instrumentalities that include such products and processes (also referred to as “Accused Instrumentalities”): Access LTE, L31L; Connect 4G, MS840; Elite, LS696; Enact, VS890;

Escape, P870; Escape 2, H445; Escape 2, H443; F7, AS780; G Flex, D950; G Flex, D959; G Flex, LS995; G Flex 2, Platinum Silver, H950; G Flex 2, Platinum Silver, LS996; G Flex 2, Volcano Red, LS996; G Flex 2, Platinum Silver, US995; G Vista, D631; G Vista, VS880; G2, D800; G2, White, D800; G2, D801; G2, White, D801; G2, LS980; G2, White, LS980; G2, White, VS980; G2, VS980; G3, AS985; G3, Metallic Black, AS990; G3, Silk White, AS990; G3, Blue Steel, D850; G3, Metallic Black, D850; G3, Silk White, D850; G3, Metallic Black, D851; G3, Silk White, D851; G3, Blue Steel, LS990; G3, Metallic Black, LS990; G3, Shine Gold, LS990; G3, Metallic Black, US990; G3, Silk White, US990; G3, Blue Steel, VS985; G3, Red, VS985; G3, Metallic Black, VS985; G3, Silk White, VS985; G3 Vigor, D725; G3 Vigor, Burgundy, LS885; G3 Vigor, Metallic Black, LS885; G4, Genuine Leather Black, H810; G4, Metallic Gray, H810; G4, Genuine Leather Brown, H811; G4, Metallic Gray, H811; G4, Deep Blue, LS991; G4, Genuine Leather Black, LS991; G4, Metallic Gray, LS991; G4, Genuine Leather Black, US991; G4, Metallic Gray, US991; G4, Shiny Gold, US991; G4, Ceramic White, VS986; G4, Metallic Gray, VS986; Intuition, VS950; Lancet, VW820; Leon, H345; Leon, MS345; Logos, US550; Lucid, VS840; Lucid 2, VS870; Lucid 3, VS876; Mach, LS860; Marquee, LG855; Motion 4G, MS770; Nexus 4, LGE960; Nexus 4, LGE960W; Nexus 5, Red, D820; Nexus 5, Black, D820; Nexus 5, White, D820; Nitro, P930; Optimus Dynamic, LGL38C; Optimus Elite, VM696; Optimus Exceed, VS840PP; Optimus Exceed 2, VS450PP; Optimus Extreme, LGL40G; Optimus F3, Titanium Silver, LS720; Optimus F3, Purple, LS720; Optimus F3, MS659; Optimus F3, P659; Optimus F3, VM720; Optimus F3Q, D520; Optimus F5, AS870; Optimus F6, D500; Optimus F6, MS500; Optimus F60, MS395; Optimus F7, LG870; Optimus F7, US780; Optimus Fuel, L34C; Optimus G, E970; Optimus G, LS970; Optimus G Pro, E980; Optimus G Pro, White, E980; Optimus L70, D321; Optimus L70, MS323; Optimus L9, MS769;

Optimus L9, P769; Optimus L90, D415; Optimus M+, MS695; Optimus Net, L45C; Optimus Plus, AS695; Optimus Ultimate, LGL96G; Optimus Zip, LGL75C; Optimus Zone, VS410PP; Optimus Zone 2, VS415PP; Realm, LS620; Spectrum, VS920; Spectrum 2, VS930; Spirit 4G, MS870; Splendor, US730; Stylo, H631; Stylo, LS770; Transpyre, VS810PP; Tribute, LS660; Tribute, LS660P; Ultimate 2, L41C; Venice, LG730; = Volt, LS740; Apex, US740; Axis, LGAS740; DoublePlay, C729; Enlighten, VS700; Esteem, MS910; G2x, P999; Ignite, AS855; Marquee, LS855; myTouch, LGE739BK; myTouch Q, LGC800VL; myTouch Q , LGC800DG; Optimus 2, AS680; Optimus Q, LGL55C; Optimus REGARD, LW770; Optimus Slider, VM701; Quantum, C900; Revolution, VS910; THRILL 4G, P925; G Pad F7.0, LK430; G Pad 8.0, V480; G Pad 8.0, V480; G Pad 7.0 LTE, VK410; G PAD 10.1 LTE, VK700; G Pad 7.0 LTE, UK410; G Pad 7.0 LTE, UK410; G Pad 7.0 LTE, V410; G Pad 10.1, V700; G Pad 10.1, V700; G Pad 7.0, V400; G Pad 7.0, V400; G Pad 8.3 LTE, VK810; G Pad 8.3, V510; G Pad 8.3, V500; G Pad 8.3, V500; 105UC9; 32LB5800; 39LB5800; 40LF6300; 40UB8000; 42LB5800; 42LB6300; 43LF6300; 47LB5800; 47LB6100; 47LB6300; 49LF6300; 49UB8200; 49UB8300; 49UB8500; 50LB6100; 50LB6300; 50PB6600; 50PB6650; 55EA8800; 55EA9800; 55EC9300; 55EG9600; 55LA9650; 55LA9700; 55LB6100; 55LB6300; 55LB7200; 55LF6300; 55UB8200; 55UB8300; 55UB8500; 55UF7600; 60LB6100; 60LB6300; 60LB7100; 60LF6300; 60PB6600; 60PB6650; 60PB6900; 65EC9700; 65EG9600; 65LA9650; 65LA9700; 65LB6300; 65LB7100; 65LF6300; 65UB9200; 65UB9300; 65UB9800; 65UF7700; 65UF8500; 65UF9500; 70LB7100; 77EG9700; 79UB9800; 79UF9500; 84LM9600; 84UB9800; 98UB9800; 98UB9810; 55LA8600; 47GA7900; 55GA7900; 60LN5600; 55LN5710; 60LN5710; 55LN5600; 50LN5600; 55LA7400; 47LA7400; 60LA7400; 55LA6900; 50LA6900; 47LA6900; 50LA6970; 55LA6970; 42GA6400; 60GA6400; 50GA6400; 55GA6400; 47GA6400; 47LA6200; 55LA6205; 50LN5750;

47LN5750; 50LN5700; 47LN5700; 32LN5700; 55LN5700; 39LN5700; 42LN5700; 60PH6700; 60PN5700; 60LN6150; 42LA6200; 47GA6450; 55GA6450; 55LA6200; 50LA6200; 60LA6200; 55LM9600; 47G2; 55G2; 47LM7600; 55LM7600; 47LM8600; 55LM8600; 55LM6400; 60LM7200; 47LM6700; 47LM6400; 42LM6200; 47LM6200; 55LM6200; 65LM6200; 47LS5700; 55LS5700; 60LS5700; 42LS5750; 47LS5750; 55LS5750; 60LS5750; 32LM6200; 42LS5700; 50PM6700; 60PM6700; 50PM9700; 60PM9700; 42PM4700; 50PM4700; 47LW5600; 55LW5600; 47LW5700; 55LW5700; 65LW6500; 47LW6500; 55LW6500; 55LW9800; 42LV5400; 47LV5400; 55LV5400; 55LV5500; 42LV5500; 47LV5500; 55LV3700; 42LV3700; 47LV3700; BPM55; BP350; BP550; BP340; BP540; BP730; BP530; BP300; BP330; BP335W; BP620; BH9431PW; BH9430PW; BH9230BW; BH6830SW; BH6730S; BH6720S; BH9220BW; BP620C; BP325W; BP320; BP200; BD690; BD670; BH9420PW; BH6820SW; LHB976; LHB326; PF85U; PA77U; Z330; Z430; V300; P420; P430H; P430L; P210; R490; R590; T280; T380; X130; X140; X200; X300; R460-L; R580-U; S510-X; R310-K; E210-M; E500-K; P300-U; R710-S; R405-A; R410-K; E300-A; R480-K; 22CV241-W; LG Watch Urbane LTE; WT6001HV; WT6001HVA; DLEX6001V; DLEX6001W; DLGX6002V; DLGX6002W; LFX31995ST; AN-WF100; ST600; AN-WF500; and/or PCRCUdT3. Plaintiff ITRI reserves the right to supplement this list at any time and without prejudice.

13. On information and belief, certain Fourth Generation Long Term Evolution (“4G LTE”) products and processes practice a system and method for bit allocation and interleaving called for by the ’326 patent. The following is a non-exhaustive, exemplary list of Defendants’ instrumentalities that include such products and processes (also referred to as “Accused Devices”): Access LTE, L31L; Connect 4G, MS840; Enact, VS890; Escape, P870; F7, AS780; G Flex, D950; G Flex, D959; G Flex, LS995; G Flex 2, H950; G Flex 2, Platinum Silver, LS996;

G Flex 2, Volcano Red, LS996; G Flex 2, US995; G Vista, D631; G Vista, VS880; G2, D800; G2, White, D800; G2, D801; G2, White, D801; G2, LS980; G2, White, LS980; G2, VS980; G2, White, VS980; G3, AS985; G3, Metallic Black, AS990; G3, Silk White, AS990; G3, Blue Steel, D850; G3, Metallic Black, D850; G3, Silk White, D850; G3, Metallic Black, D851; G3, Silk White, D851; G3, Blue Steel, LS990; G3, Metallic Black, LS990; G3, Shine Gold, LS990; G3, Metallic Black, US990; G3, Silk White, US990; G3, Blue Steel, VS985; G3, Red, VS985; G3, Metallic Black, VS985; G3, Silk White, VS985; G3 Vigor, D725; G3 Vigor, Burgundy, LS885; G3 Vigor, Metallic Black, LS885; Intuition, VS950; Lucid, VS840; Lucid 2, VS870; Lucid 3, VS876; Mach, LS860; Motion 4G, MS770; Nexus 5, Red, D820; Nexus 5, Black, D820; Nexus 5, White, D820; Nitro, P930; Optimus F3, Titanium Silver, LS720; Optimus F3, Purple, LS720; Optimus F3, MS659; Optimus F3, P659; Optimus F3, VM720; Optimus F3Q, D520; Optimus F5, AS870; Optimus F6, D500; Optimus F6, MS500; Optimus F60, MS395; Optimus F7, LG870, Optimus F7, US780; Optimus G, E970; Optimus G, LS970; Optimus G Pro, E980; Optimus G Pro, White, E980; Spectrum 2, VS930; Spirit 4G, MS870; Transpyre, VS810PP; Tribute, LS660; Tribute, LS660P; Volt, LS740; G4, Genuine Leather Black, H810; G4, Metallic Gray, H810; G4, Genuine Leather Brown, H811; G4, Metallic Gray, H811; G4, Deep Blue, LS991; G4, Genuine Leather Black, LS991; G4, Metallic Gray, LS991; G4, Genuine Leather Black, US991; G4, Metallic Gray, US991; G4, Shiny Gold, US991; G4, Ceramic White, VS986; G4, Metallic Gray, VS986; Leon, H345; Leon, MS345; Stylo, H631; Stylo, LS770; Escape 2, H445; Escape 2, H443; Lancet, VW820; Logos, US550; Esteem, MS910; Optimus Regard, LW770; Revolution, VS910; G Pad 7.0 LTE, VK410; G Pad 7.0 LTE, UK410; G Pad 7.0 LTE, V410; G Pad 8.3 LTE, VK810; and/or LG Watch Urbane LTE. Plaintiff ITRI reserves the right to supplement this list at any time and without prejudice.

First Cause of Action: Infringement of the '204 Patent

14. On information and belief, Defendants LGE, LGE-USA, and LGMP, individually, jointly, and without authority, have and continue to make, use, offer to sell, and sell within the United States, and import into the United States, Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards and thereby practice and infringe, either literally or under the doctrine of equivalents, at least one claim of the '204 patent in violation of 35 U.S.C. § 271(a).

15. On information and belief, Defendants LGE, LGE-USA, and LGMP actively induced, caused, urged, encouraged, aided and abetted their direct customers, indirect customers and potential customers to use, offer to sell, and sell Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards and thereby practice the inventions of the '204 patent within the United States, with such Defendants having knowledge of the '204 patent by at least the filing of this lawsuit and awareness of customers' and potential customers' acts constituting direct infringement the '204 patent. Defendants have done so by acts including but not limited to selling instrumentalities that include products and practice methods that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards to their direct and indirect customers; marketing the infringing capabilities of such products; and providing instructions, technical support and other support and encouragement for the use of such products. Such conduct by Defendants was intended to and actually resulted in direct infringement, including using, selling, offering for sale and/or importation of infringing products in the United States. Defendants LGE, LGE-USA, and LGMP are thus liable for their active inducements of '204 patent infringement as infringers in violation of 35 U.S.C. § 271(b).

16. On information and belief, Defendants LGE, LGE-USA, and LGMP offer to sell and sell within the United States and import into the United States components of Accused Instrumentalities and apparatuses for use in practicing the '204 patent, constituting a material part of the '204 patent's invention, knowing by at least the filing of this lawsuit the same to be especially made or especially adapted for use in or with the Accused Instrumentalities and acts that infringe the '204 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. Defendants LGE, LGE-USA, and LGMP are thus liable as contributory infringers of the '204 patent in violation of 35 U.S.C. § 271(c).

17. On information and belief, the '204 patent infringements by Defendants LGE, LGE-USA, and LGMP have been deliberate and willful at least as of the filing of this lawsuit.

18. Plaintiff ITRI has been damaged as a result of the '204 patent infringements by Defendants LGE, LGE-USA, and LGMP, has been irreparably harmed by their infringements, and will suffer additional damages and irreparable harm unless this Court enjoins such Defendants from further infringements.

19. Plaintiff ITRI's assertions of direct, inducing, and contributory infringement against Defendants LGE, LGE-USA, and LGMP are made jointly and severally, and with respect to or arising out of the same transactions, occurrences, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, and/or selling of the same products and/or processes that comply with IEEE 802.11n, IEEE 802.11ac, and/or later standards, included with Accused Instrumentalities, and practice the '204 patent. Plaintiff ITRI's complaints herein give rise to questions of fact common to all Defendants, including but not limited to common issues of '204 patent ownership, infringement, and damages.

Second Cause of Action: Infringement of the '096 Patent

20. On information and belief, Defendants LGE, LGE-USA, and LGMP, individually, jointly, and without authority, have and continue to make, use, offer to sell, and sell within the United States, and import into the United States, Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and /or later standards and thereby practice and infringe, either literally or under the doctrine of equivalents, at least one claim of the '096 patent in violation of 35 U.S.C. § 271(a).

21. On information and belief, Defendants LGE, LGE-USA, and LGMP actively induced, caused, urged, encouraged, aided and abetted their direct customers, indirect customers and potential customers to use, offer to sell, and sell Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards and practice the inventions of the '096 patent within the United States, with such Defendants having knowledge of the '096 patent by at least the filing of this lawsuit and awareness of customers' and potential customers' acts constituting direct infringement the '096 patent. Defendants have done so by acts including but not limited to selling instrumentalities that include products and practice methods that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards to their direct and indirect customers; marketing the infringing capabilities of such products; and providing instructions, technical support and other support and encouragement for the use of such products. Such conduct by Defendants was intended to and actually resulted in direct infringement, including using, selling, offering for sale and/or importation of infringing products in the United States. Defendants LGE, LGE-USA, and LGMP are thus liable for their active inducements of '096 patent infringement as infringers in violation of 35 U.S.C. § 271(b).

22. On information and belief, Defendants LGE, LGE-USA, and LGMP offer to sell and sell within the United States and import into the United States components of Accused Instrumentalities and apparatuses for use in practicing the '096 patent, constituting a material part of the '096 patent's invention, knowing by at least the filing of this lawsuit the same to be especially made or especially adapted for use in or with the Accused Instrumentalities and acts that infringe the '096 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. Defendants LGE, LGE-USA, and LGMP are thus liable as contributory infringers of the '096 patent in violation of 35 U.S.C. § 271(c).

23. On information and belief, the '096 patent infringements by Defendants LGE, LGE-USA, and LGMP have been deliberate and willful at least as of the filing of this lawsuit.

24. Plaintiff ITRI has been damaged as a result of the '096 patent infringements by Defendants LGE, LGE-USA, and LGMP, has been irreparably harmed by their infringements, and will suffer additional damages and irreparable harm unless this Court enjoins such Defendants from further infringements.

25. Plaintiff ITRI's assertions of direct, inducing, and contributory infringement against Defendants LGE, LGE-USA, and LGMP are made jointly and severally, and with respect to or arising out of the same transactions, occurrences, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, and/or selling of the same products and/or processes that comply with IEEE 802.11n, IEEE 802.11ac, and/or later standards, included with Accused Instrumentalities, and practice the '096 patent. Plaintiff ITRI's complaints herein give rise to questions of fact common to all Defendants, including but not limited to common issues of '096 patent ownership, infringement, and damages.

Third Cause of Action: Infringement of the '812 Patent

26. On information and belief, Defendants LGE, LGE-USA, and LGMP, individually, jointly, and without authority, have and continue to make, use, offer to sell, and sell within the United States, and import into the United States, Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards and thereby practice and infringe, either literally or under the doctrine of equivalents, at least one claim of the '812 patent in violation of 35 U.S.C. § 271(a).

27. On information and belief, Defendants LGE, LGE-USA, and LGMP actively induced, caused, urged, encouraged, aided and abetted their direct customers, indirect customers and potential customers to use, offer to sell, and sell Accused Instrumentalities that include products and processes that are compliant with IEEE 802.11n, IEEE 802.11ac, and/or later standards and practice the inventions of the '812 patent within the United States, with such Defendants having knowledge of the '812 patent by at least the filing of this lawsuit and awareness of customers' and potential customers' acts constituting direct infringement the '812 patent. Defendants have done so by acts including but not limited to selling instrumentalities that include products and practice methods that are compliant with IEEE 802.11n, 802.11ac, and/or later standards to their direct and indirect customers; marketing the infringing capabilities of such products; and providing instructions, technical support and other support and encouragement for the use of such products. Such conduct by Defendants was intended to and actually resulted in direct infringement, including using, selling, offering for sale and/or importation of infringing products in the United States. Defendants LGE, LGE-USA, and LGMP are thus liable for their active inducements of '812 patent infringement as infringers in violation of 35 U.S.C. § 271(b).

28. On information and belief, Defendants LGE, LGE-USA, and LGMP offer to sell and sell within the United States and import into the United States components of Accused Instrumentalities and apparatuses for use in practicing the '812 patent, constituting a material part of the '812 patent's invention, knowing by at least the filing of this lawsuit the same to be especially made or especially adapted for use in or with the Accused Instrumentalities and acts that infringe the '812 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. Defendants LGE, LGE-USA, and LGMP are thus liable as contributory infringers of the '812 patent in violation of 35 U.S.C. § 271(c).

29. On information and belief, the '812 patent infringements by Defendants LGE, LGE-USA, and LGMP have been deliberate and willful at least as of the filing of this lawsuit.

30. Plaintiff ITRI has been damaged as a result of the '812 patent infringements by Defendants LGE, LGE-USA, and LGMP, has been irreparably harmed by their infringements, and will suffer additional damages and irreparable harm unless this Court enjoins such Defendants from further infringements.

31. Plaintiff ITRI's assertions of direct, inducing, and contributory infringement against Defendants LGE, LGE-USA, and LGMP are made jointly and severally, and with respect to or arising out of the same transactions, occurrences, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, and/or selling of the same products and/or processes that comply with IEEE 802.11n, IEEE 802.11ac, and/or later standards, included with Accused Instrumentalities, and practice the '812 patent. Plaintiff ITRI's complaints herein give rise to questions of fact common to all Defendants, including but not limited to common issues of '812 patent ownership, infringement, and damages.

Fourth Cause of Action: Infringement of the '326 Patent

32. On information and belief, Defendants LGE, LGE-USA, and LGMP, individually, jointly, and without authority, have and continue to make, use, offer to sell, and sell within the United States, and import into the United States, Accused Devices that include 4G LTE products and processes and thereby practice and infringe, either literally or under the doctrine of equivalents, at least one claim of the '326 patent in violation of 35 U.S.C. § 271(a).

33. On information and belief, Defendants LGE, LGE-USA, and LGMP actively induced, caused, urged, encouraged, aided and abetted their direct customers, indirect customers and potential customers to use, offer to sell, and sell Accused Devices that include 4G LTE products and processes and practice the inventions of the '326 patent within the United States, with such Defendants having knowledge of the '326 patent by at least the filing of this lawsuit and awareness of customers' and potential customers' acts constituting direct infringement the '326 patent. Defendants have done so by acts including but not limited to selling instrumentalities that include 4G LTE products and practice 4G LTE methods to their direct and indirect customers; marketing the infringing capabilities of such products; and providing instructions, technical support and other support and encouragement for the use of such products. Such conduct by Defendants was intended to and actually resulted in direct infringement, including using, selling, offering for sale and/or importation of infringing products in the United States. Defendants LGE, LGE-USA, and LGMP are thus liable for their active inducements of '326 patent infringement as infringers in violation of 35 U.S.C. § 271(b).

34. On information and belief, Defendants LGE, LGE-USA, and LGMP offer to sell and sell within the United States and import into the United States components of Accused Devices and apparatuses for use in practicing the '326 patent, constituting a material part of the '326 patent's invention, knowing by at least the filing of this lawsuit the same to be especially

made or especially adapted for use in or with the Accused Devices and acts that infringe the '326 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. Defendants LGE, LGE-USA, and LGMP are thus liable as contributory infringers of the '326 patent in violation of 35 U.S.C. § 271(c).

35. On information and belief, the '326 patent infringements by Defendants LGE, LGE-USA, and LGMP have been deliberate and willful at least as of the filing of this lawsuit.

36. Plaintiff ITRI has been damaged as a result of the '326 patent infringements by Defendants LGE, LGE-USA, and LGMP, has been irreparably harmed by their infringements, and will suffer additional damages and irreparable harm unless this Court enjoins such Defendants from further infringements.

37. Plaintiff ITRI's assertions of direct, inducing, and contributory infringement against Defendants LGE, LGE-USA, and LGMP are made jointly and severally, and with respect to or arising out of the same transactions, occurrences, or series of transactions or occurrences relating to the making, using, importing into the United States, offering for sale, and/or selling of the same 4G LTE products and/or processes included with Accused Devices, and practice the '326 patent. Plaintiff ITRI's complaints herein give rise to questions of fact common to all Defendants, including but not limited to common issues of '326 patent ownership, infringement, and damages.

Demand for Jury Trial

38. Plaintiff ITRI demands a jury trial pursuant to Federal Rule of Civil Procedure 38.

Relief Requested

39. Plaintiff ITRI seeks judgment that:

(a) Defendants LGE, LGE-USA, and LGMP have infringed and are infringing the '204 patent, '096 patent, '812 patent, and '326 patent;

(b) Defendants LGE, LGE-USA, and LGMP, their officers, agents, servants, employees, attorneys, successors and assigns, and all other persons and entities in active concert or participation with them be enjoined from infringing, inducing infringement, and contributing to infringements of the '204 patent, '096 patent, '812 patent, and '326 patent;

(c) Plaintiff ITRI be awarded compensatory damages, together with interest and costs under 35 U.S.C. § 284;

(d) The Court increase the award of damages up to three times the amount found or assessed under 35 U.S.C. § 284 for willful infringement;

(e) The Court declare this case to be exceptional and award reasonable attorney fees under 35 U.S.C. § 285; and

(f) Grant Plaintiff ITRI such other and further relief in law or equity as the Court may deem just and proper.

Dated June 5, 2015

Respectfully Submitted,

/s/ Carl R. Roth

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