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13	UNITED STATES DISTRICT COURT		
14	SOUTHERN DISTRICT OF CALIFORNIA		
15		Signature of Children of the Children	
16	IRONWORKS PATENTS, LLC,	Case No. '17CV1220 JAH BLM	
17	Plaintiff,	COMPLAINT FOR RATENIT	
18	V.	COMPLAINT FOR PATENT INFRINGEMENT AND	
19		JURY TRIAL DEMANDED	
20	LG ELECTRONICS INC.,		
21	LG ELECTRONICS MOBILECOMM U.S.A., INC., and		
22	LG ELECTRONICS MOBILE RESEARCH U.S.A., LLC,		
23	Defendants.		
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COMPLAINT

This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code, against Defendants LG Electronics Inc., LG Electronics MobileComm U.S.A., Inc., and LG Electronics Mobile Research U.S.A., LLC (collectively "LG") that relates to five U.S. patents owned by Ironworks Patents, LLC ("Ironworks"): 6,006,114; 6,002,390; 5,915,239; 9,521,269 and RE39,231 (collectively, the "Patents-in-Suit").

PARTIES

- 1. Plaintiff Ironworks is a limited liability company organized under the laws of the State of Illinois, with an office at 125 S. Clark St., 17th Floor, Chicago, Illinois 60603.
- 2. Defendant LG Electronics Inc. is a corporation duly organized and existing under the laws of the Republic of Korea, with its principal place of business at LG Twin Towers, 20 Yeouidodong, Yeongdeungpo-gu, Seoul, Korea. On information and belief, LG Electronics Inc. can be served with process at that address.
- 3. Defendant LG Electronics MobileComm U.S.A., Inc. is a corporation duly organized and existing under the laws of California, with a place of business at 10101 Old Grove Road, San Diego, California 92131. LG Electronics MobileComm U.S.A., Inc. can be served with process through its registered agent, Corporation Service Company (d/b/a CSC-Lawyers Incorporating Service), 2710 Gateway Oaks Drive, Suite 150N, Sacramento, CA 95833.
- 4. Defendant LG Electronics Mobile Research U.S.A., LLC is a company duly organized and existing under the laws of California, with a place of business at 10225 Willow Creek Road, San Diego, California, 92131. LG Electronics Mobile Research U.S.A., LLC can be served with process through its registered agent, Corporation Service Company (d/b/a CSC-Lawyers Incorporating Service), 2710 Gateway Oaks Drive, Suite 150N, Sacramento, CA 95833.
- 5. LG makes, uses, imports, sells and offers for sale wireless mobile devices including smartphones, tablets, smart watches, and related applications and services.

6. LG is ranked by independent industry analysts as the third-largest supplier of mobile devices in the U.S.

JURISDICTION AND VENUE

- 7. This is a civil action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1, et seq., and more particularly 35 U.S.C. § 271.
- 8. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).
- 9. Each LG Defendant is subject to this Court's general personal jurisdiction pursuant to due process and/or the California Long Arm Statute, Cal. Code Civ. Proc § 410.10, due at least to its substantial business conducted in this District, including: (i) having solicited business in the State of California, transacted business within the State of California and attempted to derive financial benefit from residents of the State of California in this District, including benefits directly related to the instant patent infringement causes of action set forth herein; (ii) having placed its products and services into the stream of commerce throughout the United States and having been actively engaged in transacting business in California and in this District, and (iii) having committed the complained of tortious acts in California and in this District.
- 10. LG, directly and/or through subsidiaries and agents (including distributors, retailers, and others), makes, imports, ships, distributes, offers for sale, sells, uses, and advertises (including offering products and services through its website, http://www.lg.com/us, as well as other retailers) its products and/or services in the United States, the State of California and the Southern District of California.
- 11. LG, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products and/or services, as described below, into the stream of commerce with the expectation that they will be purchased and used by consumers in the Southern District of California. These infringing products

and/or services have been and continue to be purchased and used by consumers in the Southern District of California. LG has committed acts of patent infringement within the State of California and, more particularly, within the Southern District of California. For example, LG Electronics MobileComm U.S.A., Inc. is a California corporation. LG Electronics Mobile Research U.S.A., LLC is organized under the laws of the State of California. Both have regular and established places of business in San Diego, California.

- 12. This Court's exercise of personal jurisdiction over LG is consistent with the California Long Arm Statute, Cal. Code Civ. Proc § 410.10, and traditional notions of fair play and substantial justice.
- 13. Venue is proper in this District under §1400 (b), which provides that "Any civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business."

 Venue is proper as to Defendant LG Electronics MobileComm U.S.A., Inc., which resides in California, because it is incorporated in California and it also has a regular and established place of business in this District at 10101 Old Grove Rd., San Diego, California 92131. Venue is proper as to Defendant LG Electronics Mobile Research U.S.A., LLC because it is a company organized under the laws of the State of California and it also has a regular and established place of business in this District at 10225 Willow Creek Road, San Diego, California, 92131. Venue is proper as to Defendant LG Electronics Inc., which is organized under the laws of South Korea, under 28 U.S.C. § 1391(c)(3) that provides that "a defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants."

BACKGROUND FACTS REGARDING THE IRONWORKS PATENTS

- 14. Ironworks is the owner of record and assignee of each of U.S. Patent Nos. 6,006,114 ("the '114 Patent"); 6,002,390 ("the '390 Patent"); 5,915,239 ("the '239 Patent"); 9,521,269 ("the '269 Patent") and RE39,231 (collectively the "Patents-in-Suit").
- 15. The '390 Patent and RE39,231 were originally filed by, and assigned to, Sony Corporation ("Sony").
- 16. Sony, based in Japan, is one of the world's largest consumer electronics and entertainment companies.
- 17. Sony spends a significant amount of revenue on research and development. For example, Sony Corporation spent over \$4 billion on research and development in each year from 2012 -2016 (e.g. 468,183 million yen in 2016).
- 18. Sony's long history of innovation has resulted in the company being awarded more than 3,200 patents.
- 19. The '114 Patent and the '239 Patent were originally filed by, and assigned to, Nokia Mobile Phones Ltd. ("Nokia"). The '269 Patent is a continuation of a continuation application filed by Nokia.
- 20. Nokia is a Finnish multinational communications and information technology company, and at one time was the world's largest producer of mobile phones.
 - 21. For example, the world's first mobile phone satellite call was made on a Nokia phone.
- 22. For more than 20 years, Nokia has defined many of the fundamental technologies used in virtually all mobile devices and taken a leadership role in standards setting. As a result, Nokia owns a leading share of essential patents for GSM, 3G radio and 4G LTE technologies. These, together with other Nokia patents for Wi-Fi and video standards, form the core of Nokia's patent portfolio.

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23. Nokia spends a significant amount of revenue on research and development. For example, Nokia spent about 4.9 billion Euros on R&D investment in 2011 and 2016. Between 1984 and 2014, Nokia has invested more than 50 billion Euros to create a portfolio of 30,000 patents and patent applications.

24. Nokia's long history of innovation has resulted in the company being awarded patents in more than 10,000 patent families.

THE PATENTS-IN-SUIT AND CLAIMS-IN-SUIT

- 25. Ironworks has the exclusive right to sue and the exclusive right to recover damages for infringement of the Patents-in-Suit during all relevant time periods.
- 26. On December 21, 1999, the '114 Patent entitled "Radiotelephone enabling adjustment of alerting indicator volume/level during incoming calls" was duly and legally issued by the United States Patent and Trademark Office ("USPTO").
- 27. On December 14, 1999, the '390 Patent entitled "Text input device and method" was duly and legally issued by the USPTO.
- 28. On June 22, 1999, the '239 Patent entitled "Voice-controlled telecommunication terminal" was duly and legally issued by the USPTO.
- 29. On December 13, 2016, the '269 Patent entitled "Method of giving the user information and portable device" was duly and legally issued by the USPTO.
- 30. On August 8, 2006, U.S. Patent No. RE39,231 entitled "Communication terminal equipment and call incoming control method" was duly and legally issued by the USPTO.

LG'S INFRINGING PRODUCTS

LG has been, and now is, directly infringing claims of the Patents-in-Suit under 35 31. U.S.C. § 271(a) by making, using, offering for sale, selling, and/or importing the below accused smartphones, tablets, and other mobile wireless devices in this District and elsewhere in the United

States that include the systems claimed in the Patents-in-Suit and/or by using the methods claimed in the Patents-in-Suit, including, for example, LG's use of said methods during set-up, testing, and demonstration of its smartphones and tablets.

- 32. LG has been and now is inducing the direct infringement of method claims of the Patents-in-Suit pursuant to U.S.C. § 271(b) at least by one or more of making, using, offering for sale, selling and/or importing the below accused smartphones, tablets, and other mobile wireless devices in this District and elsewhere in the United States that were designed and intended to use and/or practice the methods and processes covered by the Patents-in-Suit. Further, LG has induced infringement by, for example, providing user guides and other support materials and services to its users and by advertising features that are used, and benefits that are achieved through use of the Patents-in-Suit.
- 33. Despite LG's awareness of the Patents-in-Suit, LG has continued these acts of inducement with specific intent to cause and encourage direct infringement of the Patents-in-Suit with willful blindness that such activities occurred, are still occurring, and constitute direct infringement of the Patents-in-Suit.

LG'S KNOWLEDGE OF THE PATENTS-IN-SUIT, HOW LG INFRINGES THEM, AND LG'S CONTINUED INFRINGEMENT DESPITE THAT KNOWLEDGE

- 34. The Patents-in-Suit were previously owned by MobileMedia Ideas, LLC ("MMI").
- 35. Prior to this litigation, MMI attempted to resolve the issues now in this litigation over a period of six years through at least three meetings with LG in Seoul, Korea; more than 55 emails to LG; three sets of claim charts sent to LG; and at least four conference calls between MMI and LG.
- 36. On February 12, 2010 counsel for MMI sent a letter to LG Electronics Inc. Federal Express delivered MMI's letter to Yong Nam, President and CEO, on or around February 15, 2010. LG has been aware of several of the Patents-in-Suit no later than that date (including the '114, '239, and '390 Patents and RE39,231.)

- 37. In addition to identifying these Patents-in-Suit, MMI's February 12, 2010 letter identified the LG products and methods that infringe them, including LG mobile phones, PCs, netbooks and tablets and smartphones, including several specific LG smartphone models available at that time.
 - 38. LG did not respond.
- 39. On January 14, 2011, MMI provided Jay Park at LG with illustrative claim charts for the MMI patents, including claim charts for the '390 Patent, the '239 Patent, and RE 39,231.
 - 40. LG did not respond.
- 41. On April 11, 2011, MMI followed up with LG by sending an email stating: "In mid-January, I provided you with the attached illustrative claims charts for selected MMI patents. Several months have now passed and I have not yet received a response. Therefore, I wanted to follow up and find out how I may be of further assistance in LG's review of MMI's patents."
- 42. On April 17, 2011, LG's Yongjin Jung responded: "Because of LGE internal reorganization, I take over this case from Mr. Park. I confirm that we received the claim charts."
- 43. On April 25, 2011, MMI responded by email: "Thank you for your message. I am glad to be in touch with you. Please let me know what more you require from me in order to proceed with this matter."
- 44. On November 5, 2011, MMI followed up with LG by sending an email stating: "I have not heard anything since our exchange in April, so I wanted to follow up and find out how I may be of assistance in your review of MMI's patents. Please let me know. If you would like to discuss this over the phone or in person, I'll be happy make the necessary arrangements."
- 45. On November 6, 2011, LG responded to MMI by email stating: "Because of our internal reorganization, the person in charge is changed to Mr. Kangjae JUNG (CCed herewith)."

- 46. On November 9, 2011, MMI followed up by sending an email stating: "Dear Mr. Kangjae Jung, It is nice to be in touch with you. Please let me know what you need from me in order to proceed with your review of this matter."
- 47. On November 10, 2011, LG responded by email stating: "Thank you your mail. As Mr. Yongjin said, LGE IP center did the organizational transformation. Although it seems that I will take this matter, we are tuning of detail job assignment. After finishing the job assignment, I'll send our thought as soon as possible."
- 48. On January 23, 2012, MMI followed up with LG by sending an email stating: "Since I have not further heard from you, I wanted to follow up and find out how LG would like to proceed regarding a license under MMI's patents. Please let me know. In addition, I am pleased to let you know that the USPTO has issued Reexamination Certificates (RC) for the 5,732,390; 5,732,390; 6,055,439 and 6,389,301 patents. You also may be interested to know that MMI recently welcomed its first licensee, a mobile handset manufacturer in Europe. Meanwhile, our discussions also continue with many of other companies and we expect our Licensee list to grow in 2012. To that end, we will be in Asia during the week beginning 13 February and would be happy to meet with you if that would be helpful in moving forward. Therefore, please suggest a few days during that week and we will arrange our schedules accordingly."
 - 49. LG did not respond.
- 50. On May 19, 2012, MMI sent an email to LG following up as follows: "Since I am now handling this matter, I would like find out how I can be of assistance to LGE with its review of MMI's patents. Please let me know where things stand. Meanwhile, we plan to be in Asia during the week beginning 25 June and would like to meet with you in order to move forward with the discussions. Therefore, please suggest a few days during that week and we will make arrangements to visit you."

- 51. On May 22, 2012, LG responded: "I received your mail well. Currently, I have a schedule conflict in your proposed schedule. Although it is not clear at this time, I'll try to arrange the meeting."
- 52. After MMI followed up again by email at least three more times, MMI and LG then met in person in Seoul, Korea on June 27, 2012 at LG's Seocho R&D campus.
- 53. On June 28, 2012, MMI followed up by email stating: "Per your request, I have attached the updated claim charts for selected MMI patents that we showed you during our meeting. Of course, if you have questions or if you require anything else in order to proceed, please let me know. I stand ready to assist and look forward to hearing from you." MMI provided claim charts, including for example claim charts for the '390 Patent, the '239 Patent, and RE39,231.
 - 54. LG did not respond.
- 55. On December 26, 2012, MMI followed up by email stating: "It has been quite some time since our last meeting in June. In case you weren't aware, Apple was recently found by a unanimous jury of the U.S. District Court in Delaware to infringe all three of the MobileMedia Ideas patents at trial, and all three patents were found valid. As you will see, the patents in suit (USP 6,070,068; USP 6,253,075 and USP 6,427,078) include the ones that MMI and LGE have been discussing since February 2010. With this verdict in hand, we should arrange another face-to-face meeting to reach conclusion on a license as soon as possible. Therefore, please let us know your availability for a meeting during January, and we will be happy to arrange it at a location most convenient for you."
- 56. MMI followed up by email two more times in January 2013 and on January 22, 2013, LG responded: "First of all, at the end of last year, our IP Center carried out an internal rearrangement, so that our upper management person for this matter is changed from Mr. Park to Mr. Jung-Sheek Juhn. For your e-mail, I tried whether we are able to block our calendar for an in-person meeting of March but it is hard to arrange the meeting at this time. So, I'm sorry for letting you know this point and I wish that we

have another opportunity to arrange a meeting in the next time. Finally, it would be helpful to update your mailing list and I hope that you and your colleagues will have an enjoyable Asia travel."

- 57. After at least four more emails, LG agreed to meet with MMI on March 15, 2013 in Seoul, Korea.
- 58. After the meeting, on March 28 or 29, 2013, in response to LG's request, MMI sent LG additional updated claim charts. MMI again identified RE 39,231, the '239 Patent, and the '390 Patent, and included claim charts detailing its infringement contentions for RE 39,231, the '390 Patent and the '239 Patent.
- 59. After at least 14 more emails, on August 5, 2013, LG emailed MMI and stated: "We are open to meeting you again, but I want to make sure we are on the same page. We originally agreed to meet you and your colleague in Korea so we can learn about your licensing program and get updates on your pending litigations. You mentioned that you wanted to present your patents, but we were not in agreement that we wanted to discuss your patents. We are still reviewing your licensing program, and it is highly unlikely we would be ready/able to provide you any substantive comments next time we meet. Nevertheless, as stated above, we are open to meeting you in Seoul with the hopes of getting some updates and more information about your program."
- 60. After at least 11 more emails, LG agreed to meet with MMI again in Seoul, Korea on November 5, 2013.
- 61. On December 1, 2015 MMI followed up with LG again stating: "It has been quite some time since we last communicated and I hope you are doing well. In case you weren't aware, following on the decision by the US Court of Appeals for the Federal Circuit in March 2015, the litigation against Apple was remanded to the US District Court of Delaware, and the case is now proceeding in due course. In light of that, I wanted to follow up and re-open the lines of communication with you. We will be happy to answer any questions you may have regarding the litigation or MMI's patent portfolio, and

we stand ready to continue working toward a license under MMI's patents. If it would be helpful to arrange a telephone call to move forward with the discussion, we will be happy to do so. "

- 62. After several more emails, the parties agreed to conduct a call on December 15, 2015.
- 63. On December 15, 2015, MMI followed up with an email stating: "Thank you for your time over the phone yesterday. It was a pleasure speaking to you. As discussed, the CAFC reviewed four patents, and found two patents to be invalid (US Patent 6,070,068 and 6,253,075) and one non-infringed (US Patent 6,427,078). Accordingly, the case has been remanded to the trial court, and is currently in discovery. The patents in suit are the USP RE39,231 (ringtone) and USP 6,393,430 (audio playlist). Of course, these cases are limited only to Apple's relevant products in suit, but MMI owns many other patents that also cover mobile devices. Therefore, MMI continues to discuss licenses with other companies, including suppliers of Android devices, and we look forward to resuming constructive discussions with LGE."
 - 64. LG did not respond to the email.
- 65. After several more emails, the parties conducted another telephone call on February 2, 2016.
- 66. After the call, MMI sent LG a follow-up email stating: "Thank you again for your time on the call yesterday." In response to LG's request, MMI's email then identified additional patents that are utilized in Android devices, including the '239 Patent and RE 39,231.
 - 67. MMI and LG then conducted another conference call on February 5, 2016.
- 68. LG never raised any non-infringement defense related to any of the Patents-in-Suit in its communications to MMI.
- 69. LG never raised any prior art issue related to any of the Patents-in-Suit in its communications to MMI.
 - 70. LG has not agreed to enter into a licensing agreement with MMI or Ironworks.

- 71. LG has not provided MMI or Ironworks any licensing proposal.
- 72. LG has not provided any licensing or settlement offer to MMI or Ironworks.
- 73. LG never entered any NDA with MMI or Ironworks.
- 74. This Complaint serves as additional notice to LG of the Patents-in-Suit and the manner in which they are infringed.
- 75. Despite knowledge of the Patents-in-Suit and knowledge of the manner in which the Patents-in-Suit are infringed as demonstrated in the provided claim charts, LG has continued to infringe, and induce the infringement of, the Patents-in-Suit.

COUNT I: INFRINGEMENT OF PAT. RE39,231 CLAIM 12

- 76. Ironworks reasserts and realleges paragraphs 1 through 75 of this Complaint as though set forth fully here.
 - 77. Claim 12 of RE39,231 provides:

1	Preamble to Claim 12	A communication terminal for informing a user of a received call from a remote caller by an alert sound, comprising:
2		
_	Element A	an alert sound generator for generating the alert sound when the call is
3		received from the remote caller;
4	Element B	control magne for controlling said clart sound concretor; and
	Element B	control means for controlling said alert sound generator; and
5		
	Element C	means for specifying a predetermined operation by the user, wherein when
6		said alert sound generator is generating the alert sound and said means for
		specifying said predetermined operation is operated by the user, said
7		control means controls said alert sound generator to change a volume of the
		generated alert sound only for the received call, without affecting the
8		volume of the alert sound for future received calls, while leaving a call
		,
9		ringing state, as perceived by the remote caller, of the call to the terminal
		from the remote caller unchanged,
10		
	Element D	further comprising: RF signal processing means for transmitting and/or
11		receiving radio waves; and an antenna for transmitting and/or receiving
		said radio waves, wherein said communication status between said
12		apparatus and said remote caller is established by said transmitted and/ or
		received radio waves.
13		received radio waves.
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- 78. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that are communication terminals for informing a user of a received call from a remote caller by an alert sound ("Accused Polite Ignore LG Smartphones"). The Accused Polite Ignore LG Smartphones include, for example, at least the LG Optimus G, G2, G3, and G4.
- 79. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Polite Ignore LG Smartphones that meet each and every element of claim 12 of the '231 Patent.
- 80. Accused Polite Ignore LG Smartphones are communication terminals that inform a user of a received call from a remote caller by an alert sound (e.g., a ringtone).
- 81. Accused Polite Ignore LG Smartphones include an alert sound generator for generating the alert sound (e.g., ringtone) when the call is received from the remote caller.
 - 82. Accused Polite Ignore LG Smartphones include control means for controlling the alert

sound generator (e.g., changing ringtone volume).

- 83. Accused Polite Ignore LG Smartphones include means for specifying a predetermined operation by the user (e.g., pressing a volume button or flipping over the phone).
- 84. When the Accused Polite Ignore LG Smartphone alert sound generator is generating the ringtone and the volume button is pressed by the user or the phone is flipped by the user, the control means controls the alert sound generator to change a volume of the generated ringtone (e.g., "silence the ringtone") only for the received call.
- 85. The ringtone is silenced for the incoming call without affecting the volume of the alert sound for future received calls, while leaving a call ringing state, as perceived by the remote caller, unchanged.
- 86. Accused Polite Ignore LG Smartphones include RF signal processing means for transmitting and/or receiving radio waves and an antenna for transmitting and/or receiving said radio waves.
- 87. The communication status between the Accused Polite Ignore LG Smartphone and the remote caller is established by the transmitted and/ or received radio waves.
- 88. Direct infringement of claim 12 occurs when LG makes, imports, uses, sells and offers for sale the Accused Polite Ignore LG Smartphones that meet claim 12 of the '231 Patent.
- 89. LG had knowledge of RE39,231 since at least February 12, 2010 and the specifics of how LG's Accused Polite Ignore LG Smartphones infringe claims of the '231 Patent since at least January 14, 2011.
- 90. LG makes, uses, offers to sell, sells, and/or imports the Accused Polite Ignore LG Smartphones knowing that the Accused Polite Ignore LG Smartphones infringe claim 12 of the '231 Patent.

COUNT II: INFRINGEMENT OF PAT. RE39,231 CLAIM 2

- 91. Ironworks reasserts and realleges paragraphs 1 through 90 of this Complaint as though set forth fully here.
 - 92. Claim 2 of the '231 Patent provides:

Element A	The communication terminal according to claim 12, wherein said control
	means controls the state of said alert sound generator to stop the sound.

- 93. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that are communication terminals for informing a user of a received call from a remote caller by an alert sound ("Accused Polite Ignore LG Smartphones"). The Accused Polite Ignore LG Smartphones include, for example, at least the LG Optimus G, G2, G3, and G4.
- 94. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Polite Ignore LG Smartphones that meet each and every element of claim 2 of the '231 Patent.
- 95. Accused Polite Ignore LG Smartphones include control means that control the state of the alert sound generator to stop the sound (e.g., "silence the ringtone").
- 96. Direct infringement of claim 2 occurs when LG makes, imports, uses, sells and offers for sale the Accused Polite Ignore LG Smartphones that meet claim 2 of the '231 Patent.
- 97. LG had knowledge of RE39,231 since at least February 12, 2010 and the specifics of how LG's Accused Polite Ignore LG Smartphones infringe claims of the '231 Patent since at least January 14, 2011.
- 98. LG makes, uses, offers to sell, sells, and/or imports the Accused Polite Ignore LG Smartphones knowing that the Accused Polite Ignore LG Smartphones infringe claim 2 of the '231 Patent.

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COUNT III: INFRINGEMENT OF PAT. 6,006,114 CLAIM 1

99. Ironworks reasserts and realleges paragraphs 1 through 98 of this Complaint as though set forth fully here.

100. Claim 1 of the '114 Patent provides:

Preamble to Claim 1	A method for decreasing the level of a user-perceptible alerting indicator of a radiotelephone, comprising the steps of:
Element A	receiving, at the radiotelephone, a signal indicating an incoming call;
Element B	in response to the radiotelephone receiving the signal indicating the incoming call, generating the alerting indicator to notify a user of the incoming call;
Element C	operating a user interface for inputting information to a controller of the radiotelephone, the information specifying that the level of the alerting indicator be reduced; and
Element D	in response to the inputted information, variably reducing the level of the alerting indicator while the incoming call is being received by the radiotelephone.

- 101. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that perform a method for decreasing the level of a user-perceptible alerting indicator of a radiotelephone ("Accused Polite Ignore LG Smartphones"). The Accused Polite Ignore LG Smartphones include, for example, at least the LG Optimus G, G2, G3, and G4.
- 102. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Polite Ignore LG Smartphones that meet each and every element of claim 1 of the '114 Patent.
- 103. Accused Polite Ignore LG Smartphones perform a method for decreasing the volume of a ringtone of the phone.
- 104. Accused Polite Ignore LG Smartphones receive a signal indicating an incoming call and, in response to the signal, generate the ringtone to notify a user of the incoming call.

- 105. Accused Polite Ignore LG Smartphones operate a user interface for inputting information to its controller, the information specifying that the volume of the ringtone be reduced.
- 106. In response to the inputted information, Accused Polite Ignore LG Smartphones variably reduce the volume of the ringtone while the incoming call is being received.
- 107. Direct infringement of claim 1 occurs when LG makes, imports, uses, sells and offers for sale the Accused Polite Ignore LG Smartphones that meet claim 1 of the '114 Patent.
 - 108. LG had knowledge of the '114 Patent since at least February 12, 2010.
- 109. LG makes, uses, offers to sell, sells, and/or imports the Accused Polite Ignore LG Smartphones knowing that the Accused Polite Ignore LG Smartphones infringe claim 1 of the '114 Patent.

COUNT IV: INFRINGEMENT OF PAT. 5,915,239 CLAIM 10

- 110. Ironworks reasserts and realleges paragraphs 1 through 109 of this Complaint as though set forth fully here.
 - 111. Claim 10 of the '239 Patent provides:

, [Preamble	A voice controlled device comprising:
	to Claim 10	
;	Element A	means for storing telephone numbers to be selected,
)	Element B	means for storing at least one identifier for each telephone number to be selected,
	Element C	means for receiving an identifier given in a voice form,
	Element D	means for interpreting received voice commands,
	Element E	means for selecting a telephone number in response to a voice command,
	Element F	wherein the identifier comprises several sub-identifiers, and the voice controlled device comprises means for storing the sub-identifiers, and means for selecting a telephone number in response to a voice command comprising a combination of several sub-identifiers.
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- 112. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that are voice controlled devices ("Accused Voice Controlled LG Smartphones"). The Accused Voice Controlled LG Smartphones include, for example, at least the LG G3, G4, G5, and G6.
- 113. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Voice Controlled LG Smartphones that meet each and every element of claim 10 of the '239 Patent.
- 114. Accused Voice Controlled LG Smartphones are voice-controlled devices via built in Google Now and/or Voice Mate software.
- 115. Accused Voice Controlled LG Smartphones include means (e.g., memory and a contact list) for storing telephone numbers to be selected and identifiers (e.g., names) for each telephone number to be selected.
- 116. Accused Voice Controlled LG Smartphones include means (e.g., a microphone) for receiving an identifier (e.g., a contact name) given in a voice form.
- 117. Accused Voice Controlled LG Smartphones include means (e.g., a processor and Voice Mate and/or Google Now software) for interpreting received voice commands and selecting a telephone number in response to a voice command.
- 118. The identifier (e.g., contact name) comprises several sub-identifiers (e.g., first and last names).
- 119. Accused Voice Controlled LG Smartphones include means for storing the sub-identifiers, and means for selecting a telephone number in response to a voice command (e.g., "call anna blake") comprising a combination of several sub-identifiers (e.g., "anna" and "blake").
- 120. Direct infringement of claim 10 occurs when LG makes, imports, uses, sells and offers for sale the Accused Voice Controlled LG Smartphones that meet claim 10 of the '239 Patent.
 - 121. LG had knowledge of the '239 Patent since at least February 12, 2010 and Ironworks'

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allegations of how the Accused Voice Controlled LG Smartphones infringe the claims of the '239 Patent since at least January 14, 2011.

122. LG makes, uses, offers to sell, sells, and/or imports the Accused Voice Controlled LG Smartphones knowing that the Accused Voice Controlled LG Smartphones infringe claim 10 of the '239 Patent.

COUNT V: INFRINGEMENT OF PAT. 6,002,390 CLAIM 1

- 123. Ironworks reasserts and realleges paragraphs 1 through 122 of this Complaint as though set forth fully here.
 - 124. Claim 1 of the '390 Patent provides:

11	Preamble	A text input device comprising:
10	to Claim 1	
12	Element A	display means capable of displaying a virtual keyboard having at least a
13		plurality of keys for character input;
14	Element B	input means for pointing at least each key on the virtual keyboard to
		perform key input by the virtual keyboard;
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16	Element C	dictionary storage means storing a plurality of candidate words and a plurality of exemplary phrases; and
17		plantify of exemplary plinases, and
17	Element D	retrieval means for retrieving a plurality of candidate words from the
18		dictionary storage means, using the key input performed from the virtual
19		keyboard by the input means as a retrieval condition;
20	Element E	the retrieval condition and the candidate words being dynamically changed in accordance with a change in a key input operation state of the virtual
21		keyboard by the input means.

- LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including 125. mobile smartphones that are text input devices ("Accused Stylus LG Smartphones"). The Accused Stylus LG Smartphones include, for example, at least the LG Stylo 2.
 - 126. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Stylus

LG Smartphones that meet each and every element of claim 1 of the '390 Patent.

- 127. Accused Stylus LG Smartphones are text input devices.
- 128. Accused Stylus LG Smartphones include display means (e.g., a device display) capable of displaying a virtual keyboard having at least a plurality of keys for character input.
- 129. Accused Stylus LG Smartphones include input means (e.g., a stylus) for pointing at least each key on the virtual keyboard to perform key input by the virtual keyboard.
- 130. Accused Stylus LG Smartphones include dictionary storage means storing a plurality of candidate words and a plurality of exemplary phrases.
- 131. Accused Stylus LG Smartphones include retrieval means (e.g., predictive text functionality) for retrieving a plurality of candidate words from the dictionary storage means, using the key input performed from the virtual keyboard by the input means as a retrieval condition.
- 132. The retrieval condition and the candidate words are dynamically changed in accordance with a change in a key input operation state of the virtual keyboard by the input means (e.g., the stylus).
- 133. Direct infringement of claim 1 occurs when LG makes, imports, uses, sells and offers for sale the Accused Stylus LG Smartphones that meet claim 1 of the '390 Patent.
- 134. LG had knowledge of the '390 Patent since at least February 12, 2010 and Ironworks' allegations of how the Accused Stylus LG Smartphones infringe the claims of the '390 Patent since at least January 14, 2011.
- 135. LG makes, uses, offers to sell, sells, and/or imports the Accused Stylus LG Smartphones knowing that the Accused Stylus LG Smartphones infringe claim 1 of the '390 Patent.

COUNT VI: INFRINGEMENT OF PAT. 6,00,390 CLAIM 18

- 136. Ironworks reasserts and realleges paragraphs 1 through 135 of this Complaint as though set forth fully here.
 - 137. Claim 18 of the '390 Patent provides:

1	Preamble	A text input method comprising:
	to Claim 18	
2	Element A	a display step of displaying a virtual keyboard having at least a plurality of keys for character input;
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4	Element B	an input step of pointing at least each key on the virtual keyboard to
5		perform key input by the virtual keyboard; and
6	Element C	a retrieval step of retrieving a plurality of candidate words from a dictionary storing a plurality of candidate words and a plurality of
7		exemplary phrases, using the key input performed from the virtual
8		keyboard at the input step as a retrieval condition;
9	Element D	the retrieval condition and the candidate words being dynamically changed
		in accordance with a change in a key input operation state of the virtual
10		keyboard at the input step.
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12	128	I.G makes uses salls offers for sale and imports wireless mobile devices i

138. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that perform a text input method ("Accused Predictive Text LG Smartphones"). The Accused Predictive Text LG Smartphones include, for example, at least the LG G5 and G6.

- 139. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Predictive Text LG Smartphones that meet each and every element of claim 18 of the '390 Patent.
 - 140. Accused Predictive Text LG Smartphones enable performance of a text input method.
- 141. Accused Predictive Text LG Smartphones display a virtual keyboard having at least a plurality of keys for character input;
- 142. Accused Predictive Text LG Smartphone users point to at least each key on the virtual keyboard to perform key input by the virtual keyboard; and
- 143. Accused Predictive Text LG Smartphones retrieve a plurality of candidate words from a dictionary storing a plurality of candidate words and a plurality of exemplary phrases, using the key input performed from the virtual keyboard at the input step as a retrieval condition.
 - 144. The retrieval condition and the candidate words are dynamically changed in accordance

with a change in a key input operation state of the virtual keyboard at the input step.

- 145. Direct infringement of claim 18 occurs when LG makes, imports, uses, sells and offers for sale the Accused Predictive Text LG Smartphones that meet claim 18 of the '390 Patent.
- 146. LG had knowledge of the '390 Patent since at least February 12, 2010 and Ironworks' allegations of how the Accused Stylus LG Smartphones infringe the claims of the '390 Patent since at least January 14, 2011.
- 147. LG makes, uses, offers to sell, sells, and/or imports the Accused Predictive Text LG Smartphones knowing that the Accused Predictive Text LG Smartphones infringe claim 18 of the '390 Patent.

COUNT VII: INFRINGEMENT OF PAT. 9,521,269 CLAIM 1

- 148. Ironworks reasserts and realleges paragraphs 1 through 147 of this Complaint as though set forth fully here.
 - 149. Claim 1 of the '269 Patent provides:

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Ш	Preamble	A mobile station comprising:
	to Claim 1	
	Element A	a user interface configured to enable a user to control operation of the mobile station by manual input and to obtain information on the operation of the mobile station,
	Element B	a tactile alert device configured to generate a tactile vibration, and
	Element C	a control circuit configured to control the tactile alert device to generate a first tactile vibration with a first pattern in response to a first event and a second tactile vibration with a second pattern that is distinctly humanly perceptibly different from the first pattern in response to a second event different from the first event,
	Element D	wherein the first event is correct user manual input.

150. LG makes, uses, sells, offers for sale, and imports wireless mobile devices, including mobile smartphones that are mobile stations ("Accused Fingerprint Scanning LG Smartphones"). The

Accused Fingerprint Scanning LG Smartphones include, for example, at least the LG G5 and G6.

- 151. LG has and continues to make, use, sell, import, and/or offer for sale the Accused Fingerprint Scanning LG Smartphones that meet each and every element of claim 1 of the '269 Patent.
 - 152. Accused Fingerprint Scanning LG Smartphones are mobile stations.
- 153. Accused Fingerprint Scanning LG Smartphones include a user interface configured to enable a user to control operation of the mobile station by manual input and to obtain information on the operation of the mobile station.
- 154. Accused Fingerprint Scanning LG Smartphones include a tactile alert device (e.g., a vibration motor) configured to generate a tactile vibration.
- 155. Accused Fingerprint Scanning LG Smartphones include a control circuit configured to control the tactile alert device to generate a first tactile vibration with a first pattern in response to a first event (e.g., a successful fingerprint scan) and a second tactile vibration with a second pattern that is distinctly humanly perceptibly different from the first pattern in response to a second event (e.g., an incoming phone call) different from the first event.
 - 156. The first event is correct user manual input (e.g., a successful fingerprint scan).
 - 157. LG has knowledge of the '269 Patent at least since the date of this Complaint.
- 158. Direct infringement of claim 1 occurs when LG makes, imports, uses, sells and offers for sale the Accused Fingerprint Scanning LG Smartphones that meet claim 1 of the '269 Patent.

WILLFUL INFRINGEMENT

159. LG has infringed and continues to infringe the above identified claims of each of the Patents-in-Suit despite its knowledge of the '114, '239, and '390 Patents and RE39,231 at least as early as February 12, 2010; specific knowledge of how LG's accused systems/methods infringe the '390 Patent, the '239 Patent, and RE39,231 since January 14, 2011; additional specific knowledge of how its accused systems/methods infringe the '390 Patent, the '239 Patent, and RE39,231 on June 28, 2012 and

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REQUEST FOR RELIEF Mobile Research U.S.A., LLC as follows:

again on March 29, 2013; and knowledge of the '269 Patent since at least the date of this Complaint, and the objectively high likelihood that its actions constitute patent infringement.

160. LG's infringement of the Patents-in-Suit is willful and deliberate and its actions constitute egregious misconduct, including refusing to take a license, refusing to negotiate in good faith, and having knowledge of the patents-in-suit and notice of the infringement but having no reasonable factual basis for non-infringement or invalidity (e.g., as alleged in paragraphs 34-75 above). This willful misconduct by LG entitles Ironworks to enhanced damages under 35 U.S.C. §284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. §285.

JURY DEMAND

Ironworks demands a trial by jury on all issues that may be so tried.

WHEREFORE, Plaintiff Ironworks requests that this Court enter judgment in its favor and against Defendants LG Electronics Inc., LG Electronics MobileComm U.S.A., Inc., and LG Electronics

- Adjudging, finding, and declaring that LG has infringed the above-identified claims of A. each of the Patents-in-Suit under 35 U.S.C. § 271;
- В. Awarding the past and future damages arising out of LG's infringement of the Patents-in-Suit to Ironworks in an amount no less than a reasonable royalty, together with prejudgment and postjudgment interest, in an amount according to proof;
- C. Adjudging, finding, and declaring that LG's infringement is willful and awarding enhanced damages and fees as a result of that willfulness under 35 U.S.C. § 284;
 - D. Adjudging, finding, and declaring that the Patents-in-Suit are valid and enforceable;
- E. Awarding attorney's fees, costs, or other damages pursuant to 35 U.S.C. §§ 284 or 285 or as otherwise permitted by law; and

1	F.	Granting Ironworks such other further relief as is just and proper, or as the Court deems
2	appropriate.	
3		Respectfully submitted,
4	June 15, 2017	/s/ Gregory Markow
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