THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

IRONWORKS PATENTS, LLC,

Plaintiff,

Civil Action No.

v.

APPLE INC.,

JURY TRIAL DEMANDED

Defendant.

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 Defendant Apple, Inc. ("Apple") that relates to three U.S. patents owned by Ironworks Patents, LLC ("Ironworks"): 6,850,150; 8,847,734 and RE39,231. In a patent infringement trial in this court, Case No. 10-cv-258-SLR, the jury found that RE39,231 was valid and infringed by Apple. The Court awarded Ironworks \$10,723,926 (\$0.125 per phone), including reasonable royalty damages and pre-judgment and post-judgment interest, based on infringement by iPhone 3G, iPhone 4 GSM, and iPhone 4 CDMA. Royalties sought herein include damages for infringement of RE39,231 by subsequent models of the iPhone. Ironworks files this Complaint now, in an abundance of caution, for the purpose of preserving its rights to seek damages on those subsequent models of the iPhone.

THE 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 Apple is a corporation organized and existing under the laws of the state of California and has its principal place of business in Cupertino, California.
- 3. Apple is engaged in the design, manufacture, marketing and sale of, among other things, smartphone and tablet devices, including but not limited to the iPhone 4s, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6 (Plus), iPhone 6s (Plus), iPhone SE, iPhone 7 (Plus), iPhone 8 (Plus), and iPhone X. Apple sells its devices throughout the United States and specifically in this district.
- 4. Apple was found liable for patent infringement and judgment was entered against Apple in the civil action captioned, *Ironworks Patents*, *LLC v. Apple*, *Inc.*, bearing Case No. 10-cv-258-SLR, which is pending appeal in the US Court of Appeals for the Federal Circuit.

JURISDICTION AND VENUE

- 5. This Complaint states causes of action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 100 *et seq.*, and, more particularly 35 U.S.C. § 271.
- 6. This Court has subject matter jurisdiction of this action under 28 U.S.C. §§ 1331 and 1338(a) in which the district courts have original and exclusive jurisdiction of any civil action for patent infringement.
- 7. Apple is subject to this Court's general personal jurisdiction pursuant to due process and/or the Delaware Long-Arm Statute, 10 Del. C. § 3104, due at least to its substantial business conducted in this District, including: (i) having transacted business within the State of Delaware and attempted to derive financial benefit from residents of the State of Delaware 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 Delaware and in this District, and (iii) having committed the complained of tortious acts in Delaware and in this District.

- 8. Apple, 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, https://www.apple.com) its products and services in the United States, the State of Delaware, and the District of Delaware.
- 9. Apple, 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 District of Delaware. These infringing products and/or services have been and continue to be purchased and used by consumers in the District of Delaware. Apple has committed acts of patent infringement within the State of Delaware and, more particularly, within the District of Delaware.
- 10. This Court's exercise of personal jurisdiction over Apple is consistent with the Delaware Long-Arm Statute, 10 Del. C. § 3104, and traditional notions of fair play and substantial justice.
- 11. Venue is proper in this District under 28 U.S.C. §1400(b) because the defendants have committed acts of infringement in this District (including for example, by selling the Apple Accused Devices to users in this District) and Apple, Inc. has a regular and established place of business in this District at 125 Stanton Christiana Road, Newark, DE 19702.

BACKGROUND FACTS REGARDING THE IRONWORKS PATENTS

- 12. Ironworks is the owner of record and assignee of each of U.S. Patent Nos. 6,850,150; 8,847,734 and RE39,231 (collectively the "Patents-in-Suit"), attached as Exhibits A, B, and C, respectively.
- 13. RE39,231, titled "Communication terminal equipment and call incoming control method," was originally filed by, and assigned to, Sony Corporation ("Sony").
- 14. Sony, based in Japan, is one of the world's largest consumer electronics and entertainment companies.
- 15. 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).
- 16. Sony's long history of innovation has resulted in the company being awarded more than 3,200 patents.
- 17. The '150 Patent, titled "Portable device", was originally filed by, and assigned to, Nokia Mobile Phones Ltd. ("Nokia"). The '734 Patent, titled "Method of giving the user information, portable device, and computer program product," is a continuation of the '150 Patent.
- 18. Nokia is a Finnish multinational communications and information technology company, and at one time was the world's largest producer of mobile phones.
- 19. For example, the world's first mobile phone satellite call was made on a Nokia phone.
- 20. 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.

- 21. Nokia spends a significant amount of revenue on research and development. For example, Nokia spent about 4.9 billion Euros 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.
- 22. Nokia's long history of innovation has resulted in the company being awarded more than 30,000 patents in more than 10,000 patent families.

APPLE'S AWARENESS OF THE PATENTS-IN-SUIT

- 23. The Patents-in-Suit were previously owned by MobileMedia Ideas, LLC ("MMI").
- 24. On February 19, 2010, MMI notified Apple by letter that its smartphone products have infringed and continue to infringe the '150 Patent and RE39,231.
- 25. On March 31, 2010, MMI sued Apple for the infringement of fourteen patents, including RE39,231.
- 26. On September 9, 2016 the jury reached a verdict that RE39,231 was valid and infringed by Apple and granted MMI \$3 million in damages, which reflected a per-unit royalty of approximately 4.2 cents/unit.
- 27. On April 17, 2017, Ironworks filed an unopposed motion to Substitute Party and took over the ongoing litigation against Apple.
- 28. On May 16, 2017, Ironworks informed Apple that its infringement of the '150 and '734 patents was ongoing and presented a claim chart demonstrating infringement of the '150

patent in an in-person meeting.

- 29. On June 15, 2017, this court issued a Final Judgment in favor of Ironworks Patents LLC against Apple Inc. for the infringement of RE39,231 and enhanced the damages award to \$10,723,926.00, which included pre and post-judgement interest and reflected a 12.5 cents/unit royalty rate.
- 30. Apple has in the past and continues to directly infringe asserted claims of the Patents-in-Suit pursuant to 35 U.S.C. § 271 by making, using, selling and importing systems, devices, and apparatuses covered by the asserted patent claims identified below, including the Apple Accused Devices.

COUNT I: INFRINGEMENT OF U.S. RE39,231 CLAIM 12

- 31. Ironworks Patents incorporates by reference the allegations set forth in paragraphs 1 to 30 of this Complaint as though set forth in full herein.
 - 32. Claim 12 of RE39,231 Patent provides:

Preamble to Claim 12	A communication terminal for informing a user of a received call from a remote caller by an alert sound, comprising:
Element A	an alert sound generator for generating the alert sound when the call is received from the remote caller;
Element B	control means for controlling said alert sound generator; and
Element C	means for specifying a predetermined operation by the user, wherein when said alert sound generator is generating the alert sound and said means for specifying said predetermined operation is operated by the user, said control means controls said alert sound generator to change a volume of the generated alert sound only for the received 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, of the call to the terminal from the remote caller unchanged,
Element D	further comprising: RF signal processing means for transmitting and/or receiving radio waves; and an antenna for transmitting and/or receiving said radio waves, wherein said call ringing state between said apparatus

and said remote caller is established by said transmitted and/or received radio waves.

- 33. "Apple Accused Polite Ignore Devices" for purposes of this count include the iPhone 4s, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6 (Plus), and iPhone 6s (Plus).
- 34. Previous Apple iPhone models (e.g., iPhone 3 and 4) have already been found to infringe claim 12 and the Apple Accused Polite Ignore Devices work the same way, with regard to this claim, as the devices already determined to be infringing.
- 35. Apple Accused Polite Ignore Devices are communication terminals for informing a user of a received call from a remote caller by an alert sound (e.g., a ringtone).
- 36. Apple Accused Polite Ignore Devices include an alert sound generator (e.g., speaker) for generating the ringtone when the call is received from the remote caller.
- 37. Apple Accused Polite Ignore Devices include control means for controlling said alert sound generator.
- 38. Apple Accused Polite Ignore Devices include means for specifying a predetermined operation by the user (e.g., pushing a volume button).
- 39. When the alert sound generator is generating the ringtone and the means for specifying the predetermined operation is operated by the user, the control means controls the alert sound generator to change a volume of the ringtone (e.g., silence the ringtone) only for the received call, without affecting the volume of the ringtone for future received calls.
- 40. The call ringing state, as perceived by the remote caller, of the call to the terminal from the remote caller remains unchanged (i.e., silencing the incoming call ringtone does not send the call to voicemail).
 - 41. Apple Accused Polite Ignore Devices include RF signal processing means for

transmitting and/or receiving radio waves and an antenna for transmitting and/or receiving the radio waves, wherein the call ringing state between the apparatus and the remote caller is established by the transmitted and/or received radio waves.

- 42. Apple directly infringes claim 12 of RE39,231 by manufacturing and selling Apple Accused Polite Ignore Devices.
- 43. Apple sold the Apple Accused Polite Ignore Devices knowing that Apple has infringed at least claim 12 of RE39,231 under 35 U.S.C. § 271(a) directly from October 7, 2011 until the expiration of the patent.
- 44. Apple's conduct between October 7, 2011 and the expiration of RE39,231 is the subject of the prior Jury Verdict and Final Judgment of infringement by this Court.
- 45. As a direct and proximate result of Apple's acts of patent infringement, Ironworks Patents has been injured and has sustained damages.

COUNT II: INFRINGEMENT OF U.S. RE39,231 CLAIM 2

- 46. Ironworks Patents incorporates by reference the allegations set forth in paragraphs 1 to 45 of this Complaint as though set forth in full herein.
 - 47. Claim 2 of RE39,231 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.

- 48. "Apple Accused Polite Ignore Devices" for purposes of this count include the iPhone 4s, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6 (Plus), and iPhone 6s (Plus).
- 49. Previous Apple iPhone models (e.g., iPhone 3 and 4) have already been found to infringe claim 2 and the Apple Accused Polite Ignore Devices work the same way, with regard to this claim, as the devices already determined to be infringing.

- 50. Apple Accused Polite Ignore Devices are telecommunications terminals wherein the control means controls the state of the alert sound generator to stop the sound (e.g., mute or silence the ringtone).
- 51. Apple directly infringes claim 2 of RE39,231 by manufacturing and selling Apple Accused Polite Ignore Devices.
- 52. Apple sold the Apple Accused Polite Ignore Devices knowing that Apple has infringed at least claim 12 of RE39,231 under 35 U.S.C. § 271(a) directly from October 7, 2011 until the expiration of the patent.
- 53. Apple's conduct between October 7, 2011 and the expiration of RE39,231 is subject to the terms of the prior Jury Verdict and Final Judgment of infringement by this Court.
- 54. As a direct and proximate result of Apple's acts of patent infringement, Ironworks Patents has been injured and has sustained damages.

COUNT III: INFRINGEMENT OF U.S. PATENT '150 CLAIM 1

- 55. Ironworks Patents incorporates by reference the allegations set forth in paragraphs 1 to 54 of this Complaint as though set forth in full herein.
 - 56. Claim 1 of the '150 Patent provides:

Preamble to Claim 1	A portable device, comprising:
Element A	control means for monitoring and controlling the operation of the device;
Element B	and a user interface which comprises alarm means for performing a silent alarm producing a silent, invisible, tactile sensation in the user;
Element C	wherein the control means are arranged to give the user abstract information on multiple internal operational events of the device by using various alarm patterns of silent, invisible sensations produced by the alarm means and sensed by the user,
Element D	the alarm patterns differing from one another such that at least one alarm

pattern characteristic sensed by the user varies, said abstract information comprising a notification of a selected item on a menu of the user interface.

- 57. "Apple Accused Tactile Alert Devices" for purposes of this count include the iPhone 4s, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6 (Plus), iPhone 6s (Plus), iPhone SE, iPhone 7 (Plus), iPhone 8 (Plus), and iPhone X.
- 58. Apple Accused Tactile Alert Devices are portable devices as described in this claim.
- 59. Apple Accused Tactile Alert Devices include a control means (e.g., a microprocessor with iOS software) for monitoring and controlling the operation of the device.
- 60. Apple Accused Tactile Alert Devices include a user interface, which includes alarm means (e.g., a Taptic Engine) for performing a silent alarm producing a silent, invisible, tactile sensation (e.g., vibration) in the user.
- 61. Apple Accused Tactile Alert Devices' microprocessor and iOS are arranged to give the user abstract information on multiple internal operational events of the device by using various vibration patterns produced by the Taptic Engine and sensed by the user.
- 62. Apple Accused Tactile Alert Devices' vibration patterns differ from one another so that the vibration characteristics sensed by the user varies.
- 63. The various vibration patterns (e.g., "System Haptics") give iPhone users abstract information on internal operational events of the device, including a notification of a selected item on a menu of the user interface (e.g., selection of a date or letter in an iPhone app).
- 64. Apple directly infringes claim 1 of the '150 Patent by manufacturing and selling Apple Accused Tactile Alert Devices.

- 65. Apple makes, uses, and/or imports the Apple Accused Tactile Alert Devices knowing that Apple has infringed and continues to infringe at least claim 1 of the '150 Patent under 35 U.S.C. § 271(a) directly.
- 66. As a direct and proximate result of Apple's acts of patent infringement, Ironworks Patents has been and continues to be injured and has sustained, and will continue to sustain, damages.

COUNT IV: INFRINGEMENT OF U.S. PATENT '734 CLAIM 1

- 67. Ironworks Patents incorporates by reference the allegations set forth in paragraphs 1 to 66 of this Complaint as though set forth in full herein.
 - 68. Claim 1 of the '734 Patent provides:

Preamble to Claim 1	A mobile station comprising:
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 one of the events is user entry of an incorrect personal identification number code.

- 69. "Apple Accused Haptic Feedback Devices" for purposes of this count include the iPhone 6s (Plus), iPhone SE, iPhone 7 (Plus), iPhone 8 (Plus), and iPhone X.
 - 70. Apple Accused Haptic Feedback Devices are mobile stations as described in this

claim.

- 71. Apple Accused Haptic Feedback Devices include a user interface that is configured to enable a user to control operation of the mobile station by manual input (e.g., touching the touchscreen) and to obtain information on the operation of the mobile station (e.g., when a phone call is incoming).
- 72. Apple Accused Haptic Feedback Devices include a tactile alert device (e.g., a linear actuator or Taptic Engine) configured to generate a tactile vibration.
- 73. Apple Accused Haptic Feedback Devices include a control circuit configured to control the tactile alert device. The linear actuator or Taptic Engine can generate a first tactile vibration with a first pattern (e.g., "Heartbeat") in response to a first event (e.g., an incoming call) and a second tactile vibration with a second pattern (e.g., "Staccato") that is distinctly humanly perceptibly different from the first pattern in response to a second event (e.g., entry of an incorrect PIN).
- 74. Apple Accused Haptic Feedback Devices vibrate in a distinct pattern when an incorrect personal identification number code (e.g., "pass code") has been entered.
- 75. Apple directly infringes claim 1 of the '734 Patent by manufacturing and selling Apple Accused Haptic Feedback Devices.
- 76. Apple makes, uses, and/or imports the Apple Accused Haptic Feedback Devices knowing that Apple has infringed and continues to infringe at least claim 1 of the '734 Patent under 35 U.S.C. § 271(a) directly.
- 77. As a direct and proximate result of Apple's acts of patent infringement, Ironworks Patents has been and continues to be injured and has sustained, and will continue to sustain, damages.

WILLFUL INFRINGEMENT

- 78. Apple has infringed and continues to infringe the above identified claims of each of the Patents-in-Suit despite its knowledge of the '150 and RE39,231 by February 2010; its specific knowledge that prior iPhone models infringe RE39,231; its specific knowledge of how Apple infringes the '150 and '734 Patents since at least May 2017; and the objectively high likelihood that its acts constitute patent infringement.
- 79. Apple's infringement of the Patents-in-Suit is willful and deliberate, entitling Ironworks to enhanced damages under 35 U.S.C. § 284.
- 80. Apple's willful infringement and unwillingness to enter into license negotiations with Ironworks make this an exceptional case such that Ironworks should be entitled to recover its attorneys' fees and costs incurred in relation to this matter pursuant to 35 U.S.C. §285.

JURY DEMAND

Ironworks demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Ironworks requests that this Court enter judgment in its favor and against Apple as follows:

- A. Adjudging, finding, and declaring that Apple has infringed of the above-identified claims of each of the Patents-in-Suit under 35 U.S.C. § 271;
- B. Awarding the past and future damages arising out of Apple's infringement of the Patents-in-Suit to Ironworks in an amount no less than a reasonable royalty, together with prejudgment and post-judgment interest, in an amount according to proof;
 - C. Awarding reasonable royalty damages arising out of Apple's acts of

infringement under at least Counts I and II between October 7, 2011 and the expiration of RE39,231, at a rate not less than that used by the Court to enhance the jury verdict, 12.5 cents/unit, together with pre-judgment interest thereon to the date of entry of judgment;

- D. Adjudging, finding, and declaring that Apple's infringement is willful and enhanced damages and fees as a result of that willfulness under 35 U.S.C. § 284;
- E. Adjudging, finding, and declaring that this is an "exceptional" case pursuant to 35 U.S.C. § 285;
- F. Awarding attorney's fees, costs, or other damages pursuant to 35 U.S.C. §§ 284 or 285 or as otherwise permitted by law; and
- G. Granting Ironworks such other further relief as is just and proper, or as the Court deems appropriate.

Dated: October 6, 2017

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