



Order of Justice Brundrett made February 7, 2020
Amended by Order of Justice Brundrett made December 18, 2018
Amended pursuant to Rule 6-1(1)(a) on November 5, 2018
Original filed November 27, 2017

No. VLC-S-S-1710984
Vancouver Registry

In the Supreme Court of British Columbia

Between

DAVID BARROQUEIRO, RYAN KETT AND ALLISON OLIVER

Plaintiffs

And

QUALCOMM INCORPORATED, QUALCOMM TECHNOLOGIES, INC, QUALCOMM
CDMA TECHNOLOGIES ASIA PACIFIC PTE LIMITED, AND QUALCOMM CANADA,
INCORPORATED

Defendants

Brought under the *Class Proceedings Act*, R.S.B.C. 1996, c. 50

FURTHER AMENDED NOTICE OF CIVIL CLAIM

This action has been started by the plaintiffs for the relief set out in Part 2 below.

If you intend to respond to this action, you or your lawyer must

- (a) file a response to civil claim in Form 2 in the above-named registry of this court within the time for response to civil claim described below, and
- (b) serve a copy of the filed response to civil claim on the plaintiff.

If you intend to make a counterclaim, you or your lawyer must

- (a) file a response to civil claim in Form 2 and a counterclaim in Form 3 in the above-named registry of this court within the time for response to civil claim described below, and
- (b) serve a copy of the filed response to civil claim and counterclaim on the plaintiffs and on any new parties named in the counterclaim.

JUDGMENT MAY BE PRONOUNCED AGAINST YOU IF YOU FAIL to file the response to civil claim within the time for response to civil claim described below.

Time for response to civil claim

A response to civil claim must be filed and served on the plaintiff,

- (a) if you were served with the notice of civil claim anywhere in Canada, within 21 days after that service,
- (b) if you were served with the notice of civil claim anywhere in the United States of America, within 35 days after that service,
- (c) if you were served with the notice of civil claim anywhere else, within 49 days after that service, or
- (d) if the time for response to civil claim has been set by order of the court, within that time.

CLAIM OF THE PLAINTIFFS

Part 1: STATEMENT OF FACTS

Definitions

1. The following definitions apply for the purpose of this Notice of Civil Claim:
 - (a) “2G CDMA” means second generation Code Division Multiple Access, a second generation cellular communication standard;
 - (b) “3G CDMA” means third generation Code Division Multiple Access, a third generation cellular communication standard;
 - (c) “Apple” means Apple Inc. and its subsidiaries, affiliates and predecessor corporations;
 - (d) “Bell” means BCE Inc. and its subsidiaries, affiliates and predecessor corporations;
 - (e) “Blackberry” means Blackberry Limited and its subsidiaries, affiliates and predecessor corporations;
 - (f) “Broadcom” means Broadcom Corporation and its subsidiaries, affiliates and predecessor corporations;
 - (g) “CDMA” means Code Division Multiple Access, a cellular communications technology;
 - (h) “Class” or “Class Members” means all persons in Canada, excluding Quebec, that purchased and/or paid for some or all of the purchase price of a Cellular Device

during the Class Period, including persons that had a contract for wireless services for at least a portion of the Class Period that included the purchase or provision of a Cellular Device;

- (i) “Class Period” means from January 1, 2007 to present;
- (j) “Cellular Devices” means ~~smartphones, tablets, and other~~ cellular phones and cellular-enabled computer tablets that contain a Modem Chip;
- (k) “Ericsson” means Telefonaktiebolaget LM Ericsson and its subsidiaries, affiliates and predecessor corporations;
- (l) “GSM” means Global System for Mobile Communications, a second generation cellular communication standard;
- (m) “Huawei” means Huawei Technologies Co., Ltd. and its subsidiaries, affiliates and predecessor corporations;
- (n) “Intel” means Intel Corporation and its subsidiaries, affiliates and predecessor corporations;
- (o) “InterDigital” means InterDigital, Inc. and its subsidiaries, affiliates and predecessor corporations;
- (p) “LG” means LG Electronics Inc. and its subsidiaries, affiliates and predecessor corporations;
- (q) “LTE” means Long Term Evolution, a fourth generation cellular communication standard;

- (r) “MediaTek” means MediaTek Inc. and its subsidiaries, affiliates and predecessor corporations;
- (s) “Modem Chip” means a semi-conductor device with 2G CDMA, 3G CDMA, UMTS/WCDMA, or premium-LTE capabilities or a combination thereof that enables a Cellular Device to transmit voice and data across wireless networks;
- (t) “Motorola” means Motorola Mobility Holdings LLC and its parent, subsidiaries, affiliates and predecessor corporations;
- (u) “NEC” means NEC Corporation and its subsidiaries, affiliates and predecessor corporations;
- (v) “Nokia” means Nokia Corporation and its parent, subsidiaries, affiliates and predecessor corporations;
- (w) “OEM” means an original equipment manufacturer – manufacturers of Cellular Devices, including Apple and Samsung;
- (x) “Panasonic” means Panasonic Corporation and its subsidiaries, affiliates and predecessor corporations;
- (y) “Qualcomm” means Qualcomm Incorporated, its subsidiaries Qualcomm Technologies, Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd., Qualcomm Canada, Inc., other subsidiaries and affiliated corporations, and any predecessor corporations;

- (z) “Rogers” means Rogers Communications Inc. and its subsidiaries, affiliates and predecessor corporations;
- (aa) “Samsung” means Samsung Electronics Co. Ltd and its subsidiaries, affiliates and predecessor corporations;
- (bb) “SEPs” means standard essential patents for Modem Chips;
- (cc) “SEP Holders” means holders of Modem Chip SEPs both prior to and after their patented technology became SEPs. SEP Holders include but are not limited to Qualcomm, InterDigital, Samsung, Nokia, Ericsson, LG, Huawei, Blackberry, Motorola, Apple, NEC, and Panasonic;
- (dd) “Telus” means Telus Corporation and its subsidiaries, affiliates and predecessor corporations;
- (ee) “*UK Monopolies Act*” means an *Act Concerning Monopolies and Dispensations with penal Lawes and the Forfeiture* thereof, 21 Jac. I, c.3;
- (ff) “UMTS” means Universal Mobile Telecommunications systems, a third generation telecommunications standard also known as WCDMA; and,
- (gg) “WCDMA” means Wideband Code Division Multiple Access, a third generation standard also known as UMTS.

Nature of the Action

2. The Plaintiffs and Class members are purchasers of cell phones and cellular telephones and other cellular devices such as -enabled computer tablets. The Plaintiffs bring this action against Qualcomm for anticompetitive agreements in the Modem Chipset market¹ in combination with other parties and for its illegal and/or anti-competitive use of the SEPs it holds that are utilized in Modem Chips. As a result of Qualcomm's illegal and/or anti-competitive agreements and conduct, royalties for SEPs and the all-in prices for Modem Chips were artificially inflated and some or all the inflated amount was passed on to Class Members in the form of artificially increased prices for Cellular Devices.

3. Cellular Devices have become a part of Canadians' everyday lives. Most business and social activities require the use of Cellular Devices. They have become a part of the social and business fabric of modern Canadian life.

4. Modem Chips enable Cellular Devices to transmit voice calls and the data² necessary for internet connectivity over cellular networks operated by entities such as Bell, Rogers, and Telus. For a Cellular Device to communicate through cellular networks and with other communication devices, both of which may have components manufactured by different entities, all the components, including the Modem Chip, must adhere to the same cellular communication standards. Cellular communication standards are set via agreements reached by industry participants, including Qualcomm, other Modem Chip suppliers and other SEP Holders, in standard setting organizations.

¹ The Modem Chip market necessarily includes or, alternatively, is inextricably intertwined with the market for SEPs, which are necessary for the manufacture, use and sale of Modem Chips.

² This refers to non-WiFi internet connectivity, which is colloquially referred to as "cellular data".

5. Qualcomm is the largest supplier of Modem Chips used in Cellular Devices. Qualcomm also holds and licenses numerous SEPs that are necessary for the manufacture, sale, and use of Modem Chips that comply with 2G CDMA, UMTS/WCDMA, 3G CDMA, and LTE cellular communication standards. Qualcomm entered into contractual agreements with standard setting organizations responsible for setting cellular communication standards to license its SEPs on fair, reasonable, and non-discriminatory (“FRAND”) undertakings.

6. Since at least January 1, 2007 and continuing to present, Qualcomm has entered into anti-competitive agreements and engaged in anti-competitive, unreasonable, unfair, discriminatory, bad faith, and unlawful conduct in the licensing of its SEPS and the sale and distribution of Modem Chips. Qualcomm’s conduct is in breach of the contractual FRAND undertakings it has made to standard setting organizations. Qualcomm’s misconduct includes, but is not limited to:

- (a) agreeing on cellular communications standards with other Modem Chip suppliers that gave Qualcomm market power in the Modem Chip and SEP markets, including with among others: Ericsson, MediaTek, Intel, Samsung and Broadcom;
- (b) agreeing on cellular communication standards with other SEP Holders that gave Qualcomm market power in the Modem Chip and SEP markets, including with among others: Qualcomm, InterDigital, Samsung, Nokia, Ericsson, LG, Huawei, Blackberry, Motorola, Apple, NEC, and Panasonic;
- (c) agreeing on cellular communication standards with other participants in the standard setting process giving Qualcomm market power in the Modem Chip and SEP markets;

- (d) after acquiring market power in the Modem Chip and SEP markets, entering into non-FRAND compliant licensing agreements with OEMs;
- (e) after acquiring market power in the Modem Chip and SEP markets, withholding Modem Chips from OEMs unless they agree to simultaneously license SEPs and other patents from Qualcomm on non-FRAND terms;
- (f) entering into agreements with OEMs that require royalties to be paid to Qualcomm on Modem Chips supplied by other Modem Chip suppliers;
- (g) entering into agreements with OEMs that imposed non-litigation and non-cooperation clauses on these OEMs and others to circumvent FRAND compliant licensing terms;
- (h) entering into agreements with other Modem Chip suppliers that imposed non-FRAND compliant licensing agreements on those suppliers or refusing to provide licenses to its competitors at all; and
- (i) entering into agreements with Apple to purchase Modem Chips exclusively from Qualcomm.

None of this conduct would have been possible without the agreements on the cellular communications standards and the establishment of SEPs. This conduct directly and intentionally resulted in an artificially inflated all-in price for Modem Chips.

7. OEMs operate in a competitive market. OEMs passed on the artificially inflated royalties of SEPs and artificially inflated prices of Modem Chips contained in Cellular Devices to Class

Members. Qualcomm knew and intended that its conduct would result in the Plaintiffs and the Class paying supra-competitive prices for Cellular Devices as a result.

8. Qualcomm has made supra-competitive profits through its illegal conduct. It has hampered competition and stifled innovation in an industry in which competition and innovation are vitally important. Canadian consumers have suffered billions of dollars in losses as a result.

Parties

9. The Plaintiff David Barroqueiro is a resident of Vancouver, British Columbia. He purchased a Moto G5 Plus cellular phone in July 2017 for personal use, for approximate \$330. The phone contains a Qualcomm manufactured Modem Chip. Qualcomm collected s non-FRAND compliant licensing royalties on this Modem Chip and charged supra-competitive prices on this Modem Chip. Mr. Barroqueiro has purchased other Cellular Devices since January 1, 2007.

10. The Plaintiff Ryan Kett is a resident of Vancouver, British Columbia. He purchased an iPhone 7 in September 2016 for personal use, for over \$1,000. The phone contains a Qualcomm manufactured Modem Chip. Qualcomm collected s non-FRAND compliant licensing royalties on this Modem Chip and charged supra-competitive prices on this Modem Chip. Mr. Kett has purchased other Cellular Devices since January 1, 2007.

11. The Plaintiff Allison Oliver is an individual residing in North Vancouver, British Columbia. In 2012, the Plaintiff purchased an iPhone 4 that uses a Qualcomm manufactured Modem Chip. Qualcomm collected non-FRAND compliant licensing royalties on this Modem Chip and charged supra-competitive prices on this Modem Chip. Ms. Oliver ~~the Plaintiff~~ has purchased other Cellular Devices since January 1, 2007.

The Defendants

12. Qualcomm Incorporated is a publicly traded company incorporated in Delaware, with its principle place of business located in San Diego, California with an address for service at 5775 Morehouse Drive, San Diego CA 92121 USA. Qualcomm Canada Inc. carries on Qualcomm Incorporated's business activities in Canada.

13. Qualcomm is both a developer of Modem Chip technology and owner of patents, as well as a manufacturer and distributor of Modem Chips. Qualcomm is a "fabless" Modem Chip manufacturer, which means that it outsources the actual manufacturing of Qualcomm Modem Chips to third parties. Qualcomm primarily conducts its operations through two main business segments: Qualcomm CDMA Technologies and Qualcomm Technology Licensing. Qualcomm CDMA Technologies deals with equipment sales while Qualcomm Technologies Licensing engages in the licensing of patents and technology. After October 1, 2012, Qualcomm CDMA Technologies was operated by Qualcomm's wholly owned subsidiary Qualcomm Technologies, Inc.

14. Qualcomm CDMA Technologies Asia Pacific Pte. Ltd. is responsible for entering into agreements with OEMs.

15. Qualcomm Technologies, Inc., Qualcomm Canada Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd., other subsidiaries, and any other related entities work with Qualcomm Incorporated as a joint enterprise. As described above, each has a distinct role in the design, manufacturing, licensing and distribution of Qualcomm Incorporated's Modem Chipsets and related SEPs. When each Defendant engaged in anti-competitive and wrongful conduct, it did so on behalf of the entire corporate enterprise.

FACTUAL BACKGROUND

Industry Background

Cellular Communication Technology and Standard Setting

16. Interoperability is critical for the proper operation of Cellular Devices. Although users may take for granted that their Cellular Device will be able to connect wirelessly to their cellular network and the Internet, interoperability does not happen by chance. Each component of a cellular network and each component of a Cellular Device using that cellular network must work with other components, regardless of which company made each component. In order to ensure the interoperability of cellular networks and mobile devices, the different parties involved agree to uniform standards.

17. Standardization occurs in member driven standard setting organizations. These include: the European Telecommunications Standards Institute (“ETSI”), Alliance for Telecommunications Industry Solutions (“ATIS”), the Telecommunications Technology Association (“TTA”), the Association of Radio Industries and Businesses (“ARIB”), the Telecommunications Technology Committee (“TTC”), the China Communications Standards Association (“CCSA”), and the Telecommunications Industry Association (“TIA”), among others. Though nationally based, these standard setting organizations and others disseminate globally applicable cellular communication standards. They also collaborate to develop and promulgate globally applicable cellular communication standards. These collaborations are known as the 3rd Generation Partnership Project (“3GPP”) and the 3rd Generation Partnership Project 2 (“3GPP2”).

18. Modem Chip suppliers (which have included companies such as Qualcomm, Ericsson, MediaTek, Intel, Samsung, and Broadcom), OEMs (such as Apple and Samsung), cellular network operators (such as Rogers and Bell), SEP Holders (such as Qualcomm, InterDigital, Samsung,

Nokia, Ericsson, LG, Huawei, Blackberry, Motorola, Apple, NEC, and Panasonic) and others involved in the cellular communications industry are members of these standard setting organizations and participants in the standard setting process. Members of the standard setting organizations reach agreements on the technical specifications of the standards to be adopted. As is explained more fully below, this necessarily includes the adoption of certain patented technologies (known as SEPs) and excludes other technologies. Qualcomm entered into agreements with Modem Chip suppliers, OEMs, SEP Holders and others involved in the standard setting process to have its patented technology included in cellular communication standards.

19. There have been four generations of telecommunications standards commercially implemented in Canada to the present. After a generation of cellular communication standards is introduced, development of the standard continues within standard setting organizations and the standard is updated periodically.

20. First generation standards that support analog voice calls were introduced in the 1980s.

21. Second generation (“2G”) standards support the digital transmissions of voice calls and internet connectivity. These standards were first introduced in the early 1990s. There were two key competing 2G standards: GSM and 2G CDMA. Qualcomm played a crucial role in the development of CDMA technology and its adoption. As a result, companies that manufacture CDMA products (including Modem Chips, Cellular Devices or infrastructure gear) have to obtain a license for Qualcomm’s CDMA SEPs (although some of these SEPs might now have expired).

22. Third generation (“3G”) standards were deployed in the early 2000s. 3G standards support higher-data transmission speeds than 2G standards, which is crucial for improved internet connectivity. There are two key competing 3G standards: UMTS/WCDMA and 3G CDMA.

UMTS/WCDMA was developed in 3GPP as the heir to the 2G GSM standard. UMTS/WCDMA utilizes a significant amount of CDMA technology. 3G CDMA was developed in 3GPP2 as the successor to the 2G CDMA standard. Qualcomm holds a large number of SEPs for both the 3G CDMA and UMTS/WCDMA standards (although some of these SEPs might now have expired).

23. The current fourth-generation (“4G”) standard supports substantially higher data transmission speeds than 3G standards. The higher data transmission speeds allows for improved internet connectivity. 4G standards were first deployed in late 2009 and early 2010. The 4G standard, LTE, was developed by 3GPP. There have been improvements made to the LTE standard since its introduction, including increased data speeds. The improvement process remains ongoing. There were initially two other competing standards: Worldwide Interoperability for Microwave Access (“WiMAX”) and Ultra Mobile Broadband (“UMB”). Both of these standards are defunct. Canadian network operators all adhere to the LTE standard adopted by Qualcomm and other Modem Chip suppliers through the standardization process described herein.

24. The telecommunications industry is now in the process of developing and implementing the 5G network. The 5G network will provide for significantly faster download speeds, higher capacity, low latency (how long it takes a signal to transfer over a network), and the Internet-of-Things.

Modem Chips

25. Modem Chips are semiconductor devices that provide Cellular Devices with wireless connectivity to cellular networks.

26. In order for a Modem Chip to communicate with a particular cellular network, the Modem Chip must comply with the standard(s) the particular network supports. For instance, a Cellular

Device must contain a Modem Chip that complies with the LTE standard in order to be able to use a network's LTE functionality and the higher data transmission speeds this functionality supports. Similarly, a Cellular Device that is only 3G CDMA compliant could not be used on a telecommunications network that only supported UMTS/WCDMA.

27. Many Modem Chips are multi-modal. That is, they comply with more than one cellular communication standard. Multi-modal Modem Chips made by Qualcomm are used in top tier Cellular Devices to ensure interoperability across cellular networks, to ensure backward compatibility with older networks, and due to cellular networks using older standards for certain functionalities.

28. The Modem Chip market necessarily includes the market for SEP licenses, which are necessary for the manufacture, use and sale of Modem Chips that comply with various cellular communication standards.

29. Canada is part of a North American and global market for Cellular Devices and Modem Chips. Modem Chips and Cellular Devices are stages of a single supply chain. Modem Chips do not serve any purpose outside of the Cellular Device market. The market for Modem Chips and Cellular Devices incorporating Modem Chips are inextricably intertwined and cost increases for SEPs and Modem Chips have a corresponding impact on the price for Cellular Devices.

Qualcomm's Market Power in the CDMA and premium-LTE Modem Chip Markets

30. Qualcomm is and has been the largest supplier of Modem Chips, including multi-modal Modem Chips, globally. Qualcomm's market power has been particularly pronounced in Modem Chips that comply with advanced LTE standards (known as "premium-LTE Modem Chips") and that utilize CDMA technology.

31. Qualcomm held an over 80% market share in the 2G and 3G CDMA Modem Chip market during the Class Period. In 2010, Qualcomm held a 95% share of the CDMA Modem Chip market. From 2014 to 2016, Qualcomm held a 96% share of the CDMA Modem Chip market. As a result of Qualcomm's market power, it has been impractical for OEMs to obtain their supply of 3G CDMA compliant Modem Chips without obtaining Modem Chips from Qualcomm.

32. The LTE Modem Chip market has various tiers. Premium-LTE Modem Chips include improvements such as faster download speeds. Premium Cellular Devices – such as Apple's iPhones – require premium-LTE Modem Chip functionality. Lower tier Modem Chips are not a reasonable substitute.

33. Qualcomm is the largest manufacturer of premium-LTE Modem Chips. From 2012 to 2014, Qualcomm controlled more than 80% of the global market of premium-LTE Modem Chips. From 2015-2016, Qualcomm controlled close to 70% of the global market for premium-LTE Modem Chips. As a result of Qualcomm's market power, it has been impractical for OEMs to obtain their supply of premium-LTE compliant Modem Chips without obtaining Modem Chips from Qualcomm.

34. Qualcomm was also a large supplier of UMTS/WCDMA compliant Modem Chips throughout the Class Period.

35. Qualcomm has secured an exclusive agreement to supply 5G capable modem chips to Apple, leaving Qualcomm positioned to obtain a large share of the 5G modem chip market.

Standardization, SEPs, and the FRAND Bargain

36. In certain circumstances, standardization can promote competition and efficiency in cellular communication by ensuring interoperability. Interoperability can allow OEMs, component manufacturers, cellular network operators, Modem Chip manufacturers, and others to invest in infrastructure and product development with confidence that their products will work together harmoniously. Likewise, consumers know that when they purchase a Cellular Device it will work on cellular networks.

37. There is a trade-off. Once a standard is adopted it is locked in. Participants in the standard make investments tied to the implementation of the standard that make it uneconomical to switch to an alternative. The implementation of the standard requires participants to use certain technologies to comply with the standard. These technologies must be used regardless of whether a superior alternative exists otherwise compatibility with the network will be lost. As a result, the adoption of a particular standard results in particular technologies being locked in with the standard.

38. Where technology necessary for the operation of a standard is covered by patents, those patents are referred to as SEPs. The SEPs, therefore, get locked into the standard along with the technology—competing technologies and patents become of limited value and relevance, as they are not part of, or applicable to, the standard. Participants in the cellular communication standard setting process attempt to have their patented technology included in cellular communication standards precisely for this reason.

39. SEPs pose a risk of being leveraged to create or reinforce market power in standard-compliant products in an anti-competitive manner. Without adequate safeguards in place, SEP

Holders can engage in patent-hold up. They can demand unreasonably inflated or discriminatory royalties and other unreasonable licensing terms for their SEPs that must be utilized to comply with the standard. For instance, SEPs can be improperly leveraged to reflect the value of: the standard itself; other technologies incorporated into the standard; or, other technologies outside the standard that are included in the end-product.

40. The risk of patent-hold up reduces the utility of standardization as companies become hesitant to make investments in infrastructure and other products dependent on the implementation of the standard.

41. Qualcomm was a participant in the standard setting process for 2G CDMA, 3G CDMA, UMTS/WCDMA, and LTE cellular communication standards. Qualcomm continues to be involved in the ongoing development of the LTE standard. Qualcomm entered into agreements with other participants in the standard setting processes, including Modem Chip suppliers and SEP Holders, to have its patented technologies included in these standards. These agreements allowed Qualcomm to acquire and maintain market power. The market power arises as a result of Qualcomm holding patents to technology that must be utilized— and therefore licensed from Qualcomm—by those practicing a standard and, in particular, OEMs.

42. To counter the potential for abuses and offset the imbalance in bargaining position that owners of SEPs have, standard setting organizations, including those listed in paragraph 17, have intellectual property rights policies that require participants to declare patents and make contractually binding undertakings to license their patents on FRAND terms and conditions prior to a patent being included in a standard, and thereby becoming a SEP.

43. FRAND contractual undertakings have two basic requirements. They require licensors to (a) license the relevant SEPs to *any* party seeking a license; and (b) license on terms, including royalty terms, that are fair, reasonable, and non-discriminatory.

44. If patent holders refuse to commit to licensing on FRAND terms and conditions, then standard setting organizations will either: (a) design the standard so as not to use the patented technology; or (b) cease work on the standard.

45. FRAND undertakings aim at preventing SEP Holders from exercising the market power they gain from the incorporation of their patents into the cellular communications standard. They require SEP Holders to relinquish their right to use their intellectual property rights to exclude others from participating in the standard. FRAND undertakings allow for competitive compensation for innovation while preventing abuses, including overvaluing the SEP to reflect the items noted in paragraph 39.

Qualcomm's Contractual FRAND Undertakings

46. Standard setting organizations require the holder of a SEP (or a patent that may become essential) to undertake that they will grant irrevocable licenses on FRAND terms and conditions to those seeking licenses.

47. Qualcomm has provided FRAND undertakings, including to the standard setting organizations listed in paragraph 17. This includes FRAND undertakings for SEPs related to the WCDMA/UTMS, 2G CDMA, 3G CDMA, LTE, and 5G standards. Standard setting organizations, Modem Chip suppliers, SEP Holders, OEMs and others relied on Qualcomm's FRAND undertakings to agree to include technology covered by Qualcomm's patents in cellular communication standards.

48. Qualcomm is contractually bound by its FRAND undertakings.

Qualcomm's Anti-Competitive, Unfair, Unreasonable, Discriminatory, and Bad Faith Conduct

49. Qualcomm acquired and maintained market power through its agreements with Modem Chip suppliers, SEP Holders and others and by participation in cellular communication standard setting processes with Modem Chip suppliers, SEP Holders and others resulting in Qualcomm's successful inclusion of its patented technology in the 2G CDMA, 3G CDMA, UMTS/WCDMA, and LTE and, more recently, the 5G standards. Qualcomm then used this market power to enter agreements with Modem Suppliers, OEMs, and others, and to engage in a course of anti-competitive, unfair, unreasonable, discriminatory, and bad faith conduct that breached its contractual FRAND undertakings. This intentional court of conduct allowed Qualcomm to extract non-FRAND royalty rates and licensing conditions from Modem Chip manufacturers, OEMs and others. Qualcomm's conduct allowed it to leverage its anti-competitive market power in the Modem Chip SEP markets to earn supra-competitive Modem Chip prices and SEP royalties. The 5G standard is in the infancy-stage. It is premature to determine whether Qualcomm's anti-competitive conduct extends to 5G modem chips.

Qualcomm acquires Market Power and refuses to licence Competitors enters into non-FRAND Agreements with Competitors

~~50.~~ Prior to 2008, Qualcomm acquired and entrenched its market power by entering into agreements in the standard setting process, including with Modem Chip suppliers (such as Ericsson, MediaTek, Intel, Samsung, LG, and Broadcom and VIA Telecom) and SEP Holders (such as InterDigital, Samsung, Nokia, Ericsson, LG, Huawei, Blackberry, Motorola, Apple, NEC, and Panasonic) to ensure that its patented technology was included in cellular communication standards. Qualcomm always had the intention of using this market power to charge supra-

~~competitive Modem Chip prices and SEP royalties. Qualcomm further acquired and entrenched its market power by refusing to license its SEPs to competitors unless they agreed to restrictive non-FRAND licensing terms and conditions. For instance, Qualcomm refused to license its SEPs to other suppliers of Modem Chips unless that supplier agreed to a license that only allowed the supplier to sell its Modem Chips to OEMs that also had a licensing agreement with Qualcomm. The licensing agreements also required the other supplier to pay a royalty. Qualcomm then leveraged its SEPs and market power to require OEMs to pay royalties to Qualcomm as a percentage of the market value of their end products — even if Qualcomm did not manufacture the Modem Chip used in the end-product. As a result, members of the Class that purchased Cellular Devices containing Modem Chips manufactured by other Modem Chip suppliers paid supra-competitive prices for those Cellular Devices during the Class Period.~~

51. After 2008, Qualcomm maintained and extracted market power by entering into agreements in the standard setting process, including with Modem Chip suppliers (such as those listed above) and SEP Holders (such as those listed above) to ensure that its patented technology was included in cellular communication standards.

52. Qualcomm ~~also~~ continued its anti-competitive, unfair, unreasonable, discriminatory, and bad faith licensing practices by adopting a business wide policy of refusing to license its FRAND encumbered SEPs to competitors and potential competitors, ~~thereby restricting entry into the Modem Chip market. This is~~ — despite requests ~~from competitors~~ for licenses to Qualcomm's SEPs on FRAND terms. ~~This practice prevented potential competitors from entering the market, promoted competitors to exit the market, and delayed or hampered the entry and success of other competitors. Competitors who have survived in the market have failed to thrive. They are unable to sell sufficient volumes to properly fund research and development initiatives.~~

53. Instead of providing a license, Qualcomm only offered patent non-assert agreements or other arrangements with Modem Chip suppliers short of an actual irrevocable license to use its SEPs. The agreements required competitors to comply with onerous reporting obligations, including sensitive business information regarding their customers and volume of sales. In these agreements, Qualcomm expressly reserved the right to collect royalties on the Modem Chips the other supplier supplies to OEMs. Qualcomm also continued its practice of requiring OEMs to pay royalties as a percentage of the price of their end-product Cellular Devices, including those containing non-Qualcomm Modem Chips.

54. The royalty that OEMs pay to Qualcomm when they purchase other suppliers' Modem Chips operates as a "surcharge" "tax". It raises OEMs' all-in costs for the Modem Chips (the nominal price of a Modem Chip and any royalties the OEM must pay) supplied by other suppliers. If Qualcomm were to use market power to raise the all-in prices of its own Modem Chips only, those price increases would spur OEMs to seek substitutes and would attract entry and competitive pricing from competitors. By contrast, imposing a "surcharge" "tax" enabled Qualcomm to raise the all-in prices of Modem Chips without spurring substitution or attracting entry. The "surcharge" "tax" on other Modem Chips removed the competitive constraint on Qualcomm's own all-in Modem Chip price.

55. These licensing practices failed to meet Qualcomm's contractual FRAND undertakings to provide irrevocable licenses on fair, reasonable and non-discriminatory terms to willing licensees. As a direct result of these practices, other suppliers, such as Samsung (who is both an OEM and manufacturer Modem Chips for its own use), do not sell CDMA or premium-LTE Modem Chips in competition with Qualcomm and instead only manufacture Modem Chips for their own use. Other suppliers have left the Modem Chip market during the Class Period despite a marked

increase in the size of the Modem Chip market. Finally, other potential suppliers failed to enter the market. Those that have remained in the market operate on the fringe and have failed to thrive.

Qualcomm's Shift to Licensing OEMs

56. Prior to the Class Period, Qualcomm shifted from licensing to Modem Chip suppliers to licensing directly to OEMs. Qualcomm wielded its market power and engaged in the anti-competitive acts outlined below to extract anti-competitive licensing terms and excessive royalties from OEMs. Qualcomm made this transition to avoid patent exhaustion and extract excessive royalties based on the price of the finished Cellular Device, even though Qualcomm continues to sell and license non-Modem Chip components on an exhaustive basis. In particular, under its standard Subscriber Unit License Agreements with OEMs, Qualcomm receives consideration in the form of a running royalty rate calculated as a percentage of the licensee's wholesale net selling price of the Cellular Device (minus applicable deductions), subject to royalty caps. As indicated below, as a result of Qualcomm's "no license, no chip" policy, OEMs were required to pay this royalty on sales by Qualcomm and other Modem Chips suppliers.

57. By calculating the royalty on the price of the Cellular Device, instead of the Modem Chip, Qualcomm was able to extract a royalty more than the cost of the Modem Chip. This practice is inconsistent with industry practice. Typically, royalties are calculated based on the value of the smallest salable patent-practicing unit, which would be the Modem Chip. Additionally, this pricing structure did not account for features of Cellular Devices that are unrelated to Qualcomm's SEPs, such as the cost of colour LCD panels, camera modules, operating systems, applications, software, memory, design, etc. The costs of these non-communication-related components contribute 60-70% of the cost of a smartphone.

Qualcomm Extracts Non-FRAND licensing terms from OEMs by licensing its Patents as a Comprehensive Package

58. Qualcomm holds a large number of SEPs for the GSM, UMTS/WCDMA, 2G CDMA, 3G CDMA, and LTE standards. During the Class Period, Qualcomm refused s to license its Modem Chip SEPs on a patent-by-patent basis to OEMs and others. Instead, Qualcomm required licensees to license its entire portfolio, without even disclosing patent lists or sharing patent claim charts with its counterparties. Qualcomm leveraged s the sheer volume of its entire patent portfolio, to avoid good faith negotiations and extract anti-competitive licensing terms.

59. Qualcomm's 2017 10-K filing states that SEP-only licenses "negatively impact" Qualcomm's licensing revenues. Qualcomm receives higher royalties for portfolio licenses than SEP-only licenses.

Qualcomm's No-License, No-Chip Policy

60. Since at least 2001 and continuing until present, Qualcomm has leveraged its market power as a Modem Chip supplier and SEP Holder to condition OEMs' access to its Modem Chips on acceptance of a separate license to Qualcomm's SEPs on anti-competitive, unfair, unreasonable, discriminatory, and bad faith terms and conditions. This practice is unique within Qualcomm and the industry. This is the only market where Qualcomm has sufficient market power to dictate the terms of supply. In other markets, Qualcomm licenses on an exhaustive basis and supplies components without a separate license agreement.

61. FRAND contractual undertakings are only enforceable via court imposed FRAND compliant licensing terms. Qualcomm's no-license, no-chip policy denies OEMs this enforcement mechanism. It does so by dramatically increasing OEMs' costs of engaging in litigation to obtain FRAND compliant licensing terms. An OEM challenging Qualcomm's royalty demands as non-

FRAND compliant will have risks having its access to Modem Chips cut off by Qualcomm. It is not practical for OEMs to rely solely on other suppliers besides Qualcomm for Modem Chips given Qualcomm's market power. OEMs must thus accede to Qualcomm's licensing terms—including non-litigation and non-cooperation clauses that formalize OEMs' inability to challenge Qualcomm's licensing practices.

62. Among other things, Qualcomm has utilized the no license, no chips policy to demand and obtain supra-competitive royalty rates and demand and obtain excessive royalties based off the wholesale price of the OEMs' entire Cellular Device—regardless of whether a particular device has a Qualcomm Modem Chip.

63. To enforce the no license, no chips policy, Qualcomm threatened to and did cut off Modem Chip supply to OEMs. Cutting off supply was detrimental to OEMs. Modem Chips are an essential component of a Cellular Device. As explained above, Qualcomm controlled the Modem Chip market and OEMs were unable to obtain any or sufficient supply of Modem Chips from alternative manufacturers. Therefore, without supply from Qualcomm, the OEMs could not produce Cellular Devices. Qualcomm also refused to provide sample Modem Chips to OEMs, delayed delivery of software, withheld engineering support, or threatened to require the return of software until OEMs signed a license.

Qualcomm's Mandatory Cross-Licensing of Licensee's Patents

64. In another non-industry standard practice, Qualcomm forced OEMs to cross-license their patents to Qualcomm typically on a royalty-free basis and accept a provision whereby the OEMs agreed not to assert their SEPs against Qualcomm's other licensees who made a similar commitment.

65. Qualcomm's royalty rate stays constant even though Qualcomm receives the cross-license to licensees' patent portfolios, which are independently valuable and are not uniform between OEMs.

66. This cross-licensing arrangement gave Qualcomm an advantage over other competitors in that it created a more comprehensive set of patents that Qualcomm could make available to its customers.

Qualcomm's Unlawful Agreement with Apple Inc. to entrench LTE as the sole 4G Cellular Communication Standard

67. In the mid-2000s, standard setting organizations began working on 4G cellular communications standards. Development was commenced on three competing standards: UMB, WiMAX and LTE. Qualcomm initially supported UMB but later firmly switched its support to the LTE standard.

68. WiMAX posed a direct competitive threat to the widespread adoption of the LTE standard. Major companies with a stake in cellular communications standards promoted WiMAX.

69. In a 2007 contractual agreement with Apple, Qualcomm conditioned partial SEP royalty relief in exchange for Apple's agreement that it would not market wireless devices that were WiMAX compatible. Given Apple's uniquely important position in the smartphone and tablet markets, Apple's agreement to renounce WiMAX helped ensure the widespread adoption of LTE for which Qualcomm had a much higher percentage of SEPs. This agreement assisted Qualcomm's acquisition of market power in the premium-LTE market by ensuring that there would be no threat to Qualcomm's market power in the form of a competing alternative standard.

Qualcomm's Exclusive Dealing with Apple Dealings & Discriminatory Royalties

70. At material times and continuing to the present, Qualcomm has offered OEMs so-called chip incentive funds in order to gain exclusive or near-exclusive supply arrangements and foreclose OEMs from purchasing from rival Modem Chip suppliers. Using these chip incentives, Qualcomm offers OEMs discounts or rebates on the purchase price of Modem Chips, if the OEM purchases all or nearly all of their Modem Chips from Qualcomm (typically 85 to 100% of supply). The result was that Qualcomm charged higher royalty rates if the OEM purchased Modem Chips from a competitor and thereby created a strong incentive for OEMs to purchase all, or nearly all, their Modem Chips from Qualcomm.

71. OEMs have accepted these arrangements because they offer the semblance of relief from Qualcomm's excessive royalty rates. In reality, however, these arrangements create de facto exclusivity for Qualcomm, permitting it to entrench its market share and exercise its market power for its own benefit through its licensing agreements.

72. Qualcomm's licensing agreements with Apple are an example of this. Apple uses contract manufacturers (including Foxconn, Pegatron, Wistron, and Compal Electronics, Inc.) to assemble its products. The contractors paid Qualcomm a royalty based on a percentage of the cost of the selling price of the Cellular Device. Apple then reimbursed the contract manufacturer. Apple negotiated directly with Qualcomm on the royalty.

73. Qualcomm entered into a series of licensing agreements with Apple ~~requiring~~ regarding those royalties that, through the use of incentive funds, compelled Apple to ~~exclusively use Qualcomm's~~ pay higher royalty rates to use competitors' Modem Chips contrary ~~to its non-discriminatory~~ Qualcomm's FRAND licensing undertakings. In result, Apple and its contract manufacturers were compelled ~~forced~~ to exclusively use Qualcomm's Modem Chips. Apple would

not have entered into agreements with Qualcomm on these exclusionary terms if Qualcomm had not acquired and maintained its market power in the Modem Chip market as described herein.

~~74. Apple manufactures iPhones and iPads, and uses Modem Chips within these products. Apple is a particularly important OEM for Modem Chip manufacturers given the large volume of premium Cellular Devices that it manufactures and the technical expertise and other experience Modem Chip manufacturers gain from working with Apple.~~

~~75. Apple hires contract manufacturers to assemble its products. The contract manufacturers agree to pay non-FRAND artificially inflated royalties to Qualcomm. The contract manufacturers pass on these royalty costs to Apple. Qualcomm has conditioned partial royalty rebates to Apple on the acceptance of certain contractual terms. This includes a term in Qualcomm and Apple's agreements from 2007 to 2016 for Apple to use Qualcomm's Modem Chips exclusively in all new iPhones and iPads. Absent Qualcomm's market power obtained as described above, Apple would have entered into supply agreements with other Modem Chip manufacturers and suppliers at lower prices.~~

76. In 2005, two years prior to the launch of the iPhone, Apple reached out to potential Modem Chip suppliers, including Qualcomm. Qualcomm advised Apple of its practice of requiring OEMs to purchase a license prior to providing any samples. Qualcomm also advised Apple of its requirement for Apple to cross-license its patents. Apple proposed a 5% royalty rate based on the Modem Chip price (\$1.50 per Modem Chip). Qualcomm was able to use its market power to extract a royalty rate of \$7.50, based on the value of the Cellular Device. As part of the agreement (entered into in 2007), Apple was required to publicly renounce with WiMAX, a competing cellular standard supported by Intel (see paragraph 69 above).

77. In 2009, Apple and Qualcomm entered into another supply agreement. Again, Apple was required to purchase a license. During negotiations, Qualcomm knew that it had monopoly power and used that power to charge a \$5 price premium on CDMA Modem Chips over UMTS Modem Chips (UMTS was an alternative standard).

78. As part of its 2011 supply agreement, Qualcomm agreed to pay Apple up to US\$1 billion in various incentive funds. The amount of the funds was tied to Apple launching particular products and volume of sales. The agreement contained a provision whereby it would automatically terminate if Apple sold any Apple product that contains a non-Qualcomm Modem Chip. In such event, Apple would forfeit any future incentive funds and be required to repay any received incentive funds. These terms ensured exclusivity.

79. In 2011 and 2012, Apple began looking for a second supplier and considered Intel to be a viable alternative. Apple intended to use Intel for an iPad as a test run before using Intel in an iPhone. Qualcomm was aware of this potential threat and once again used rebates as a carrot to gain exclusivity. As part of its 2013 supply agreement, Qualcomm again used rebates to ensure exclusivity.

80. Eventually, in 2016, Apple began purchasing Modem Chips from Intel. However, Qualcomm's exclusive dealing arrangement had successfully delayed Intel's ability to sell Modem Chips to Apple by several years. Working with Apple had several benefits, including boosting revenue to support research and development, exposure to Apple's "best-in-class" engineering resources, and business opportunities with other OEMs.

81. Apple then commenced litigation challenging Qualcomm's royalty rates. In 2019, the litigation was resolved, with Apple agreeing to a 6-year patent licensing agreement with Qualcomm, and a payment of US\$4.5 to 4.7 billion from Apple to Qualcomm.

82. Several hours after the settlement was announced, Intel announced its exit from the 5G smartphone Modem Chip business. Instead, Intel would assess opportunities for the use of 4G and 5G Modem Chips in computers, Internet-of-Things devices and other data-centric devices. The related press release indicated that Intel was exiting the 5G smartphone Modem Chip market because "it has become apparent that there is no clear path to profitability and positive returns." Intel invested billions of dollars and employed "an army of engineers" to generate a premium LTE Modem Chip and was ultimately unable to break into the industry.

83. Qualcomm also entered into similar arrangements with other OEMs. This includes but is not limited to:

- (a) A July 2004 agreement with LG that created an incentive fund, which conditioned royalty rebates on LG purchasing 85% of its CDMA Modem Chips from Qualcomm. Further Qualcomm and LG agreements in 2007 and 2016 also created incentive funds that lowered LG's effective royalty rates on Qualcomm Modem Chips:
- (b) A 2003 agreement with Samsung that lowered Qualcomm's royalty rate (in the form of a royalty cap) if Samsung purchased 85% of its Modem Chips from Qualcomm. 2018 agreements between Qualcomm and Samsung created an incentive fund for payments that lowered Samsung's effective royalty rate on

Qualcomm Modem Chips if Samsung purchased 100% of its premium Modem Chips from Qualcomm:

- (c) A 2003 agreement with Huawei that reduced Huawei's royalty rate to 2.65% in exchange for Huawei purchasing 100% of its Modem Chips from Qualcomm:
- (d) A 2005 agreement with Motorola for the creation of an incentive fund that resulted in Motorola's effective royalty rate on Qualcomm Modem Chips being reduced in exchange for Motorola entering a WDCMA license agreement. In 2016, Qualcomm offered Motorola an effective royalty rate reduction but only if Motorola purchased 100% of its Modem Chips from Qualcomm: and
- (e) A 2010 agreement with Blackberry that reduced Blackberry's effective royalty rate to 4.37% in exchange for buying exclusively Qualcomm Modem Chips.

Qualcomm Charged Non-FRAND Royalty Rates and Artificially Inflated Modem Chip Prices

84. As indicated in paragraph 56 above, Qualcomm calculated its royalty based on the price of the Cellular Device. By calculating the royalty on the price of the Cellular Device, instead of the Modem Chip, Qualcomm was able to extract a royalty more than the cost of the Modem Chip. This pricing structure did not account for features of Cellular Devices that are unrelated to Qualcomm's SEPs, such as the cost of colour LCD panels, camera modules, operating systems, applications, software, memory, design, etc. The costs of these non-communication-related components contribute 60-70% of the cost of a smartphone. Further, Qualcomm's royalty rate has stayed stable, notwithstanding that the non-communication-related features of a Cellular Device are becoming increasingly important and making up a greater portion of the value of a Cellular Device.

85. Qualcomm is not the top contributor to cellular standards. Nokia and Ericsson made a comparable or greater contribution to cellular standards, but their royalty revenues are a fraction of Qualcomm's. Further, Qualcomm royalty rate has stayed constant notwithstanding that its SEP share in the cellular standards has declined.

86. Qualcomm's unreasonably high royalties have not been tested through litigation. Qualcomm uses the threat of terminating supply to deter litigation. Moreover, although Qualcomm's licensing agreements contain an arbitration clause, Qualcomm has rendered that clause nugatory by responding to attempts to arbitrate by threatening to cut off Modem Chip supply and technical support, and requiring return of software.

87. Qualcomm's market power also enabled Qualcomm to charge unlawfully inflated prices on Modem Chips. Its prices were unabated by normal competitive forces.

Qualcomm's Anti-Competitive and Non-FRAND Licensing Agreements Impacts Canadian purchasers of Cellular Devices

88. The conduct described above has allowed Qualcomm to extract anti-competitive, unfair, unreasonable, discriminatory, and bad faith licensing terms from OEMs, including artificially inflated royalty rates for its SEPs that are passed on to Class Members.

89. Consumers purchase or obtain Cellular Devices from direct purchaser OEMs such as Apple and Samsung, through network carriers such as Rogers, Bell and Telus, sometimes as part of a service contract, or through resellers.

90. OEMs, network carriers and other resellers are subject to vigorous price competition, and as a result, they do not absorb all of the artificially inflated royalties and prices for Modem Chips. Instead, they pass through some of the excessive cost in the price of Cellular Devices to consumers.

Qualcomm's misconduct, as alleged herein, directly artificially inflated the price of Cellular Devices purchased by the Plaintiffs and millions of Canadians in the Class.

91. Through its actions, Qualcomm intended to cause economic harm, and did cause economic harm, to the Plaintiffs and Class Members as a necessary means of enriching itself. In particular, Qualcomm's decision to tie its royalty regime to the wholesale pricing of Cellular Devices was intended to harm, and did harm, the Plaintiffs and Class Members as a necessary means of enriching itself at their expense.

REGULATORY INVESTIGATIONS AND PENALTIES

92. Qualcomm has been subject to regulatory investigations relating to the conduct described herein. These investigations have led to substantial fines being levied against Qualcomm and orders that Qualcomm change its licensing practices.

93. In February 2015, Qualcomm agreed to pay 6.088 billion yuan (USD \$975 million) to settle allegations made by Chinese authorities (the National Development and Reform Commission) that Qualcomm had violated Chinese anti-trust laws. Qualcomm was found to: a) control the SEP licensing market for Modem Chips based on CDMA and LTE technologies; and, b) abused that market power by, among other things, charging excessive and unfairly high royalties to licensees that were forced to accept a packaged patent license.

94. In October 2017, Qualcomm Incorporated was fined T\$23.4 billion (USD \$774.14 million) by the Taiwanese Fair Trade Commission for breaching Taiwanese anti-trust laws in relation to its unfair licensing practices. Qualcomm Incorporated appealed the decision and subsequently reached a settlement with the Commission for T\$2.73 billion.

95. On January 20, 2017, the Korea Fair Trade Commission (“KFTC”) released the full decision in relation to its investigation into Qualcomm Incorporated, Qualcomm Technologies, Inc., and Qualcomm CDMA Technologies Asia-Pacific Pte. Ltd.’s anti-competitive and unreasonable licensing practices. The KFTC concluded that Qualcomm engaged in anti-competitive conduct and violated its FRAND undertakings. The KFTC issued a fine of approximately 1.03 trillion won (USD \$854 million).

96. The KFTC also required Qualcomm to stop its abusive SEP licensing practices. Specific obligations and restrictions included³:

- (a) a prohibition on Qualcomm’s practice of limiting Modem Chip manufacturers’ rights to sell or use the Modem Chips in its licensing and other agreements;
- (b) a prohibition on Qualcomm requiring its licensees to cross-license their own patents without remuneration;
- (c) a prohibition on Qualcomm’s no-license, no chips policy;
- (d) a prohibition on Qualcomm’s coercive practice of licensing its patents as a comprehensive portfolio;
- (e) a prohibition on Qualcomm bringing patent infringement suits while licensing negotiations are ongoing;

³ These obligations and restrictions applied to: (i) modem chip manufacturers headquartered in Korea and their affiliates; (ii) cellular devices manufactured by companies in Korea and the affiliates of such manufacturers; (iii) cellular device manufacturers selling in or into Korea and their affiliates; (iv) companies supplying cellular devices to the companies referenced in (ii); and, (v) modem chip manufacturers selling to companies described in (ii), (iii) and (iv).

- (f) a requirement for Qualcomm to negotiate licensing terms for its SEPs to Modem Chip manufacturers in good faith by following industry practices and certain procedural negotiating requirements. This includes a requirement for an offer to be made to Modem Chip manufacturers that lists the patents to be licensed, the relevance of those patents to the cellular communication standards, and that discloses the royalty calculation method; and
- (g) a requirement for Qualcomm to have an independent third party, such as the courts, resolve licensing disputes.

97. The U.S. Federal Trade Commission ("FTC") filed a complaint in January 2017 charging Qualcomm Incorporated with using anticompetitive agreements and tactics to maintain its market power in the supply of Modem Chips, including by engaging in non-FRAND licensing practices. OEMs, including Samsung, have joined as *amicus curiae* in the FTC proceeding to stop Qualcomm's misconduct; Federal Trade Commission v. Qualcomm Incorporated, Case No 17-CV-00220 (United States District Court – Northern District of California, Judge Lucy Koh presiding).

98. On November 6, 2018, the United States District Court granted the FTC partial summary judgment, holding that Qualcomm's commitments to two SSOs (ATIS and TIA) required Qualcomm to license its Modem Chips to other suppliers on FRAND terms.

99. On May 21, 2019, the United States District Court entered judgment against Qualcomm, finding breaches of the Sherman Act and the FTC Act. Qualcomm permanently enjoined from:

- (a) conditioning the supply of Modem Chips on a customer's patent license status;

- (b) entering express or de facto exclusive dealing agreements for the supply of Modem Chips; and
- (c) preventing any customer from communicating with a government agency about a potential law enforcement or regulatory matter.

100. Qualcomm was also required to:

- (a) renegotiate its license terms with customers in good faith free from anti-competitive threats;
- (b) make exhaustive SEP licenses available to Modem Chip suppliers (i.e. its competitors) on FRAND on terms, with the ability to turn to arbitration on the judiciary to resolve impasses; and
- (c) submit to monitoring and compliance procedures for seven years.

101. Qualcomm is appealing the decision.

102. The European Commission opened a formal investigation into Qualcomm Incorporated's conduct including its exclusive dealing agreement with Apple. On January 24, 2018, the European Commission announced that Qualcomm Incorporated was being fined €997 million for its misconduct. Qualcomm is appealing the decision.

Part 2: RELIEF SOUGHT

103. An order certifying this action as a class proceeding;
104. A declaration that the Defendants engaged in conduct contrary to s. 61 of the *Competition Act*, R.S.C. 1985, c. C-34 ("*Competition Act*") as it existed prior to March 11, 2009, s. 45 of the *Competition Act* as it existed prior to March 11, 2010, and ss. 45 and 46 of the *Competition Act*;
105. A declaration that Plaintiffs and Class Members are entitled to damages pursuant to s. 36 of the *Competition Act*;
106. A declaration that the Defendants engaged in an unlawful means conspiracy;
107. A declaration that the Defendants engaged in a predominant purpose conspiracy;
108. A declaration that the Defendants caused loss by unlawful means to the Plaintiffs and Class Members;
109. A declaration that the Defendants breached the Ontario *Statute of Monopolies* R.S.O. 1897, c. 323 ("*OMA*") and the *UK Monopolies Act*;
110. An order for treble damages pursuant to the *OMA* and *UK Monopolies Act*;
111. General damages;
112. Special damages;
113. A declaration that the Plaintiffs and Class Members are entitled to waive their tort claims and claim waiver of tort;

114. Restitution for unjust enrichment and waiver of tort;
115. Exemplary and punitive damages;
116. Interest under the *Court Order Interest Act*, RSBC 1996, c 79;
117. Costs for the administration of any court award or judgment obtained in this action;
118. Costs of investigation and prosecution of this proceeding pursuant to s. 36 of the *Competition Act*;
119. Double costs pursuant to the *OMA* and *UK Monopolies Act*; and
120. Such further and other relief as this Honourable Court may deem just.

Part 3: LEGAL BASIS

Qualcomm Breached Part IV of the *Competition Act*

121. Qualcomm's conduct in combination with other suppliers of Modem Chips and other participants in the standard setting process, including SEP Holders, was in breach of Part IV of the *Competition Act*. The Plaintiffs claim loss and damage under s. 36 of the *Competition Act* resulting from this unlawful conduct.

122. From at least as early as January 1, 2007 until at least March 11, 2009, Qualcomm:

- (a) by agreement, threat, promise, or any like means attempted to influence upward or discourage the reduction of the price at which Modem Chips and Cellular Devices were sold in Canada contrary to s. 61 of the *Competition Act*; and/or,
- (b) refused to supply a product or otherwise discriminated against other persons engaged in the Modem Chip and Cellular Device market due to the pricing policy of those entities contrary to s. 61 of the *Competition Act*.

123. Particulars of Qualcomm's misconduct includes, but is not limited to:

- (a) Qualcomm entered into horizontal agreements, including with other Modem Chip suppliers and other SEP Holders, and vertical agreements with participants in the standard setting process to have Qualcomm's patented technology included in cellular communication standards;
- (b) Qualcomm entered into agreements with others, including Modem Chip suppliers and OEMs, to preclude the adoption of an alternative to the LTE standard;

- (c) Qualcomm and OEMs entered into agreements that discriminate against other Modem Chip manufacturers, limiting competition;
- (d) Qualcomm and others, including OEMs, Modem Chip suppliers and other SEP Holders, entered into agreements, that unreasonably inflate Modem Chip prices and SEP licensing royalties;
- (e) Qualcomm entered into agreements with OEMs to exclusively purchase Modem Chips from Qualcomm, lessening competition;
- (f) after reaching agreements that gave it market power, Qualcomm refused to license FRAND encumbered SEPs and/or licensed SEPs on non-FRAND terms and conditions;
- (g) after reaching agreements that gave it market power, Qualcomm collected royalties at collusive, artificially inflated, and supra-competitive prices;
- (h) after reaching agreements that gave it market power, Qualcomm and others, including OEMs and Modem Chip suppliers, entered into non-FRAND licensing agreements;
- (i) Qualcomm leveraged its entire patent portfolio to charge non-FRAND royalty rates;
- (j) after reaching agreements that gave it market power, Qualcomm required OEMs to agree to non-FRAND licensing terms in order to be supplied Qualcomm Modem Chips;

- (k) Qualcomm, OEMs, and other Modem Chip suppliers entered into agreements that Qualcomm was aware, or ought to have been aware, would prevent or lessen competition;
- (l) the conduct described in paragraphs 6, 124 to 136; and
- (m) Qualcomm refused to supply Modem Chips or enter into licensing agreements with OEMs unless non-litigation and non-regulatory co-operation terms were accepted.

124. Qualcomm's behaviour from January 1, 2007 to March 11, 2009 described in paragraphs 122 to 123 continued to negatively impact competition and increase prices for Modem Chips and Cellular Devices after March 11, 2009 and until the end of the Class Period. Qualcomm's conduct during this period served to establish base-line royalties and the terms upon which Qualcomm's Modem Chips were licensed and sold. These practices continued throughout the entire Class Period and directly caused supra-competitive royalties to be paid for Qualcomm's SEPs. As a result, the Plaintiffs and Class paid supra-competitive prices for Cellular Devices throughout the Class Period.

125. Contrary to s. 45 of the *Competition Act*, from at least as early as January 1, 2007 until at least March 11, 2010, Qualcomm engaged in a conspiracy, combination, and agreement with others, including OEMs, SEP Holders, and other Modem Chip suppliers, to:

- (a) unduly limit the production, manufacture, or supply of Modem Chips;
- (b) prevent, limit or lessen, unduly, competition in the production, manufacture, purchase, sale, or supply in the Modem Chip market; and/or,

(c) otherwise restrain or injure competition in the Modem Chip market unduly.

126. Particulars of Qualcomm's conduct includes, but is not necessarily limited to, the conduct described at paragraph 123 above.

127. Qualcomm's behaviour from January 1, 2007 to March 11, 2010 described in paragraphs 121 to 123 established and maintained its market power and continued to negatively impact competition and increase prices after March 11, 2010 and until the end of the Class Period. Qualcomm's conduct directly caused supra-competitive prices to be paid for Qualcomm's SEPs for the duration of the Class Period. As a result, the Plaintiffs and Class paid supra-competitive prices for Modem Chips throughout the Class Period.

128. Contrary to s. 45 of the *Competition Act*, for the duration of the Class Period, Qualcomm conspired, agreed or arranged with Modem Chip suppliers and SEP Holders to:

- (a) fix, maintain, increase or control the price for the supply of Modem Chips; and/or
- (b) fix, maintain, control, prevent, lessen or eliminate the production or supply of Modem Chips.

129. Particulars of Qualcomm's conduct includes, but is not limited to:

- (a) Qualcomm entered into horizontal agreements, including with Modem Chip suppliers and SEP Holders, to have Qualcomm's patented technology included in cellular communication standards;

- (b) Qualcomm entered into horizontal agreements with others, including Modem Chip suppliers and SEP Holders, to unreasonably inflate SEP Royalties and Modem Chip prices;
- (c) Qualcomm and Modem Chip suppliers, entered into non-FRAND licensing agreements;
- (d) collecting royalties at collusive, artificially inflated, and supra-competitive prices; and/or
- (e) other conduct described herein.

130. Qualcomm's behaviour described in paragraphs 128 to 129 occurred throughout the Class Period. Qualcomm's conduct directly resulted in supra-competitive royalties being paid for Qualcomm's SEPs and supra-competitive royalties being paid for Qualcomm's Modem Chips. As a result, the Plaintiffs and Class paid supra-competitive prices for Cellular Devices throughout the Class Period.

131. The Canadian subsidiary, Qualcomm Canada Inc., participated in and furthered the objectives of the conspiracy, described above, by knowingly modifying its competitive behaviour in accordance with instructions received from its parent company, Qualcomm Incorporated. Qualcomm Canada Inc. thereby acted in concert with Qualcomm Incorporated in carrying out the conspiracy and is liable for such acts in breach of s. 46 of the *Competition Act*.

Qualcomm engaged in a Civil Conspiracy

132. Qualcomm Incorporated, Qualcomm Canada Inc., Qualcomm Technologies, Inc., Qualcomm Canada Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd, OEMs,

participants in the standard setting process, and others have engaged in a civil conspiracy—both an unlawful means conspiracy and predominant purpose conspiracy.

133. During and prior to the Class Period, at times and places some of which are unknown to the Plaintiffs and the Class, Qualcomm, participants in the standard setting process, and others wrongfully and unlawfully conspired and agreed with one another, as described above.

134. Qualcomm Incorporated, Qualcomm Technologies, Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd., Qualcomm Canada Inc., participants in the standard setting process and other unnamed co-conspirators were motivated to conspire. Their predominant purpose and concern was to harm the Plaintiffs and Class by requiring them to pay artificially inflated prices for Cellular Devices and to illegally increase their profits on the sale thereof.

135. The Defendants' conduct, participants in the standard setting process, and the conduct of other unnamed co-conspirators' conduct particularized herein were prohibited, unlawful, and illegal acts, including:

- (a) an unlawful restraint of trade at common law and equity;
- (b) an offence related to competition contrary to s. 61 of the *Competition Act* as it existed prior to March 11, 2009, s. 45 of the *Competition Act* as it existed prior to March 11, 2010, and contrary to s. 45 of the *Competition Act*;
- (c) an offence contrary to s. 1 of the *Sherman Act*, CH 647, 26 Stat. 209, 15 U.S.C. and the applicable U.S. state competition laws;
- (d) an offence contrary to the *OMA* and *UK Monopolies Act*;

- (e) a breach of Qualcomm's FRAND contractual undertakings;
- (f) an offence contrary to Article 101 of the *Treaty on the Functioning of the European Union*, OJ No. C 326/47; and,
- (g) illegal acts contrary to the competition laws of South Korea, Japan, China, and Taiwan among others.

136. The acts described above were unlawful acts directed towards purchasers of Modem Chips and Cellular Devices, including the Plaintiffs and Class, which unlawful acts Qualcomm Incorporated, Qualcomm Technologies, Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd., Qualcomm Canada Inc. knew in the circumstances would cause injury to the Plaintiffs and Class. These unlawful acts did cause injury to the Plaintiffs and Class.

137. Qualcomm's conduct in combination with others constitutes a tortious conspiracy to injure the Plaintiffs and other Class Members and renders the Defendants liable to pay the resulting damages.

Qualcomm caused loss by unlawful means to the Plaintiffs and Class Members

138. Further, or in the alternative, Qualcomm's unfair, unreasonable, discriminatory, bad faith, and anti-competitive acts, as particularized herein, were unlawful and prohibited conduct against third parties that were intended to cause economic harm to the Plaintiffs and the Class.

139. Qualcomm's unlawful and prohibited conduct supports third party civil actions for damages or compensation under Canadian law, under the law of the jurisdiction in which the acts took place, and under the law of the applicable contract. Assuming they suffered a loss the

following third parties, including standard setting organizations, OEMs, and others have a civil claim against Qualcomm arising from the facts described herein for:

- (a) breach of contract, including Qualcomm's breach of its contractual FRAND licensing undertakings;
- (b) breach of the duty of good faith in contractual relations;
- (c) breach of the *OMA* and *UK Monopolies Act*;
- (d) civil conspiracy;
- (e) unjust enrichment;
- (f) the tort of intimidation;
- (g) damages arising under s. 36 of the *Competition Act* for conduct contrary to s. 61 of the *Competition Act* as it existed prior to March 11, 2009, for conduct contrary to s. 45 of the *Competition Act* as it existed prior to March 11, 2010, and for conduct contrary to s. 45 of the *Competition Act*;
- (h) damages arising from breaches of the *Sherman Act*, ss. 1 and 2 and the U.S. state competition laws;
- (i) damages arising from breaches of Articles 101 and 102 of the *Treaty on the Functioning of the European Union*; and
- (j) damages arising from breaches of competition laws in other jurisdictions, including but not limited to South Korea, Japan, China, and Taiwan.

140. Qualcomm intended that its conduct would cause harm to the Plaintiffs and Class by causing them to pay higher prices for Cellular Devices. Alternatively, Qualcomm intended to harm the Plaintiffs and Class as a necessary means of enriching itself. Qualcomm intended and knew that the harm suffered by the Plaintiffs and Class would follow as a natural consequence of its conduct particularized herein.

141. The Plaintiffs and Class suffered harm as a result of Qualcomm's conduct in the form of artificially inflated prices for the Cellular Devices they purchased.

Qualcomm was Unjustly Enriched

142. Further, or in the alternative, the Plaintiffs plead that they and other members of the Class are entitled to recover the unjust enrichment accruing to Qualcomm.

143. Qualcomm has benefited from the supra-competitive licensing royalties. The Plaintiffs and other members of the Class have suffered a corresponding deprivation in the amount of the artificially inflated prices they have paid for Cellular Devices.

144. There is no juristic reason for Qualcomm's enrichment, since the artificially inflated royalties and Modem Chip prices received by Qualcomm stems from its prohibited and unlawful acts including, but not limited to:

- (a) breaches of Part VI of the *Competition Act*;
- (b) breaches of the *OMA* and *UK Monopolies Act*;
- (c) an unlawful restraint of trade at common law and equity;
- (d) breaches of the *Sherman Act* and the applicable U.S. state anti-trust laws;

- (e) breaches of the *Treaty on the Functioning of the European Union*; and
- (f) breaches of the applicable competition laws in other jurisdictions, including but not limited to South Korea, Japan, China, and Taiwan.

145. The Plaintiffs and Class Members are entitled to restitution of the benefit received by Qualcomm from the Plaintiffs and Class Members.

146. In the alternative, justice and good conscience require that Qualcomm disgorge to the Plaintiffs and Class Members an amount equal to the unlawful overcharge from the sales of Cellular Devices containing Modem Chips.

The Statute of Monopolies

147. Further, or alternatively, the Plaintiffs and Class Members plead and rely on the *OMA* and *UK Monopolies Act*.

148. The SEPs Qualcomm obtained from standard setting organizations constitute a monopoly over Modem Chips and other integral components in Cellular Devices. Qualcomm had no intention of adhering to FRAND terms at any time, but nevertheless entered into binding agreements to license, sell and/or make available their patented technologies, on FRAND terms. As a result, the SEPs should never have been essential to the standards, and the monopolies granted by the standard setting organizations were void at all material times and constitute an invalid monopoly, which is actionable under the *OMA* and the *UK Monopolies Act*.

149. In the alternative, as soon as Qualcomm breached FRAND terms in Canada, it breached binding agreements with OEMs and other competitors, rendering the monopolies it gained through its SEPs void monopolies from that point onward.

150. The Plaintiffs and Class Members were hindered, grieved, disturbed by occasion of the illegal monopoly in the form of damages sustained by paying inflated prices for the Cellular Devices. As a result, the Plaintiffs and the Class Members claim under s. 4 of the *OMA* and articles 3 and 4 of the *UK Monopolies Act* for treble damages.

Waiver of Tort

151. Further, or alternatively, the Plaintiffs plead that Class Members waive their tort claims and claim an accounting or other such restitutionary remedy for disgorgement of the revenues generated by the Defendants' illegal, wrongful and anti-competitive conduct.

152. The Plaintiffs claim that their entitlement is appropriate for, among other things, the following reasons:

- (a) the Defendants cannot in good conscience retain revenue acquired via the acts described herein;
- (b) the integrity of the marketplace would be undermined if an accounting was not required; and,
- (c) absent the tortious, illegal, and criminal conduct described herein, the Defendants would have received less revenue than they otherwise would have.

Damages

153. The Plaintiffs and Class Members purchased Cellular Devices during the Class Period. They have suffered loss and damages as a result of the Defendants' wrongful, unlawful and criminal acts described herein, which had the effect of raising, maintaining, and stabilizing the

prices of Modem Chips and Cellular Devices at artificially inflated and supra-competitive levels throughout the Class Period.

154. The Plaintiffs and Class assert that their combined damages are capable of being reasonably assessed on an aggregate basis as the difference between the price actually paid for Cellular Devices and the prices they would have paid in the absence of Qualcomm's misconduct.

Exemplary and Punitive Damages

155. Qualcomm used its SEPs and market power to profit from illegal and prohibited conduct. Cellular Devices are ubiquitous in Canadian society and a necessary element of almost all Canadians' personal and working lives. Qualcomm was well aware that its actions would have a significant adverse impact on the Plaintiffs and Class. The conduct of Qualcomm was high-handed, reckless, without care, deliberate and in disregard of the Plaintiffs' and Class Members' rights. Qualcomm's conduct purposely stifled innovation worldwide. Such harm to competition requires a deterrent award.

156. In order to achieve its deterrence and public interest objectives, any punitive damages award should be significant. The punitive damages award must be substantial to reflect both Qualcomm's misfeasance in shielding its conduct (Qualcomm deliberately sought to shield its behaviour from regulatory or court supervision by coercing others into silence) and the egregious nature of the conduct itself. A punitive damages award must be sufficiently large to ensure the artificially inflated prices are not perceived by manufacturers, distributors, retailers, and licensors as a mere cost of doing business or a license to breach the law.

Statutes Relied Upon

157. The Plaintiffs plead and rely on the:

- (a) *Competition Act*;
- (b) *Sherman Act* and the applicable U.S. state competition laws;
- (c) *Treaty on the Functioning of the European Union*;
- (d) the applicable competition laws in other jurisdictions, including but not limited to South Korea, Japan, China, and Taiwan;
- (e) *OMA* and *UK Monopolies Act*; and
- (f) *Class Proceedings Act*.

Joint Enterprise

158. Qualcomm Technologies, Inc., Qualcomm Canada Inc., Qualcomm CDMA Technologies Asia Pacific Pte. Ltd., other subsidiaries, and any other related entities work with Qualcomm Incorporated as a joint enterprise. As described above, each has a distinct role in the design, manufacturing, licensing and distribution of Qualcomm Incorporated's Modem Chipsets and related SEPs. When each Defendant engaged in anti-competitive and wrongful conduct, it did so on behalf of the entire corporate enterprise.

Service ex juris

159. The Plaintiffs have the right to serve this Notice of Civil Claim on the defendants pursuant to the *Court Jurisdiction and Proceedings Transfer Act*, SBC 2003, c 28, s. 10, because there is a

real and substantial connection between British Columbia and the facts on which this proceeding is based.

160. The Plaintiffs rely on the following grounds, in that this action concerns:

- a. Restitutionary obligations that, to a substantial extent, arose in British Columbia (*CJPTA*, s 10(f));
- b. a tort committed in British Columbia (*CJPTA*, s 10(g)); and
- c. a business carried on in British Columbia (*CJPTA*, s 10(h)).

Plaintiffs' address for service:


Klein Lawyers LLP
1385 W 8th Ave #400
Vancouver, BC V6H 3V9

Place of trial: Vancouver, BC

The address of the registry is:

800 Smithe Street
Vancouver, BC
V6Z 2E1

Date: March 5, 2020



Signature of lawyer for plaintiff
C/O David A. Klein

Rule 7-1 (1) of the Supreme Court Civil Rules states:

(1) Unless all parties of record consent or the court otherwise orders, each party of record to an action must, within 35 days after the end of the pleading period,

(a) prepare a list of documents in Form 22 that lists

(i) all documents that are or have been in the party's possession or control and that could, if available, be used by any party at trial to prove or disprove a material fact, and

(ii) all other documents to which the party intends to refer at trial, and

(b) serve the list on all parties of record.

Appendix

[The following information is provided for data collection purposes only and is of no legal effect.]

Part 1: CONCISE SUMMARY OF NATURE OF CLAIM:

This is a claim for damages and disgorgement at common law for unjust enrichment and the unlawful means tort arising out of the defendant's business practices in the modem chipset industry.

Part 2: THIS CLAIM ARISES FROM THE FOLLOWING:

A personal injury arising out of:

- a motor vehicle accident
- medical malpractice
- another cause

A dispute concerning:

- contaminated sites
- construction defects
- real property (real estate)
- personal property
- the provision of goods or services or other general commercial matters
- investment losses
- the lending of money
- an employment relationship
- a will or other issues concerning the probate of an estate
- a matter not listed here

Part 3: THIS CLAIM INVOLVES:

- a class action
- maritime law
- aboriginal law
- constitutional law
- conflict of laws
- none of the above
- do not know

Part 4:

Competition Act, RSC 1985 c C-35

Court Jurisdiction and Proceedings Transfer Act, SBC 2003, c 28

Court Order Interest Act, RSBC 1996, c 79