United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,

Plaintiff,

v.

QUALCOMM INCORPORATED,

Defendant.

Case No. 17-CV-00220-LHK

ORDER DENYING MOTION TO DISMISS (REDACTED)

Re: Dkt. No. 69

Plaintiff Federal Trade Commission ("FTC") sues Defendant Qualcomm Incorporated ("Qualcomm") for violation of § 5 of the Federal Trade Commission Act ("FTCA"), 15 U.S.C. § 45. *See* ECF No. 1. Before the Court is Qualcomm's motion to dismiss. ECF No. 69. Having considered the submissions of the parties, the relevant law, and the record in this case, the Court hereby DENIES Qualcomm's motion to dismiss.

I. BACKGROUND

A. Factual Background

This case requires understanding the complicated interaction between cellular communications standards, standard essential patents ("SEPs"), and the market for baseband

processors, or "modem chips."[1] The Court begins by discussing cellular communications standards and modem chips generally. Then, the Court discusses Qualcomm's cellular communications SEPs and Qualcomm's participation in the markets for modem chips. Finally, the Court discusses FTC's allegations that Qualcomm has used its SEPs and its modem chips monopoly to harm competition in certain modem chips markets.

1. Cellular Technology and the Baseband Processor Industry Generally

i. Cellphone Networks

Cellular communications depend on widely distributed networks that implement cellular communications standards. ECF No. 1 ("Compl."), ¶ 18. Network operators, including Verizon, AT&T, T-Mobile, and Sprint, "build networks that comply with these standardized protocols." *Id.*

Cellular communications standards have evolved over four "generations." *Id.* ¶ 19. First-generation cellular communications standards were developed in the 1980s. These standards support analog transmissions of voice calls. *Id.* ¶ 19a.

Second-generation ("2G") cellular communications were developed in the early 1990s. *Id.* ¶ 19b. 2G cellular communications standards support digital transmissions of voice calls. *Id.* The leading 2G standards are the Global System for Mobile communications standard ("GSM") and second generation Code Division Multiple Access standard ("2G-CDMA"). *Id.* In the United States today, AT&T and T-Mobile operate "legacy" GSM networks. By contrast, Verizon and Sprint operate "legacy" 2G-CDMA networks. *Id.*

In the late 1990s and early 2000s, third-generation ("3G") cellular communications standards were developed. *Id.* ¶ 19c. The leading 3G standards are the Universal Mobile Telecommunications system ("UMTS") and third-generation CDMA ("3G-CDMA") standards. *Id.* Network operators that deployed 2G GSM networks, such as AT&T and T-Mobile,

[1] The Complaint and the parties' motions refer to baseband processors as "processors," "chips," "modem chips," and "chipsets." Qualcomm states in its motion that "these terms are not in fact interchangeable," but Qualcomm uses the term "modem chips" in its motion. *See* Mot. at 5 n.6. For simplicity and consistency, the Court will refer to baseband processors throughout this Order as "modem chips" or "chips."

transitioned to 3G UMTS networks. By contrast, network operators that deployed 2G-CDMA networks, such as Verizon and Sprint, transitioned to 3G-CDMA networks. *Id.*

In late 2009 and early 2010, fourth-generation ("4G") cellular communications standards were developed. *Id.* ¶ 19d. These standards support substantially higher data-transmission speeds than 3G standards. *Id.* The leading 4G standard is Long-Term Evolution ("LTE"). *Id.* Most major network operators worldwide have deployed LTE. *Id.*

ii. Standard Essential Patents

Cellular communications standards, such as CDMA and LTE standards, are adopted by standards setting organizations ("SSOs"). *Id.* ¶ 48. SSOs that adopt cellular telecommunications standards include the European Telecommunication Standards Institute ("ETSI"), the Telecommunications Industry Association ("TIA"), and the Alliance for Telecommunications Industry Solutions ("ATIS"). *Id.* ¶ 52.

In setting a cellular communications standard, SSOs often include technology in the cellular communications standard that is patented. Patents that cover technology that is incorporated into a standard are known as "standard essential patents" ("SEPs"). *Id.* ¶ 42.

Importantly, before incorporating a technology into a standard, SSOs "often require patent holders to disclose their patents and commit to license [SEPs] on fair, reasonable, and non-discriminatory ("FRAND") terms." *Id.* "Absent such requirements, a patent holder might be able to parlay the standardization of its technology into a monopoly in standard-compliant products." *Id.* ETSI, TIA, and ATIS require each party that participates in the standard setting process "to commit to license its SEPs to firms that implement the standard on FRAND terms." *Id.* ¶ 53.

"Most SSOs neither prescribe FRAND license terms nor offer a centralized dispute-resolution mechanism in the event that a patent holder and standard implementer cannot agree on [FRAND] terms." *Id.* ¶ 51. Instead, "most SSOs rely on the outcome of bilateral negotiations between the parties, with resort to remedies available from courts in the event of disagreement." *Id.*

iii. Baseband Processors

In order to communicate with a cellular communications network, a cellphone handset ("handset") must contain a semiconductor device known as a baseband processor, or "modem chip." *Id.* ¶ 20. More specifically, in order to communicate with a *particular* cellphone network, the handset must contain a modem chip that complies with the cellular communications standards that the particular cellphone network supports. *Id.* ¶ 21. For example, a handset that contains a modem chip that complies only with UMTS standards cannot communicate with a cellular network that uses 3G-CDMA standards. *Id.* "Multi-mode" modem chips can comply with more than one cellular communications standard. *Id.* ¶ 22.

In order to be used on a network that deploys LTE—the leading 4G standard used by major cellular network operators—the handset must ordinarily contain a modem chip that complies with LTE standards *in addition* to earlier 2G and 3G standards. *Id.* ¶ 23. This is for two reasons. First, because "LTE network infrastructure generally supports data, rather than voice, traffic," a handset must contain a modem chip that complies with 2G and 3G standards in order to transmit voice calls. *Id.* Further, "because the process of upgrading and replacing network infrastructure takes years, a [modem chip] must comply with 2G and 3G standards to communicate with the network in areas where the operator has not yet replaced or upgraded infrastructure equipment." *Id.*

Accordingly, in order to deploy LTE standards, a handset requires a multi-mode modem chip that complies with "legacy 2G and 3G standards." *Id.* ¶ 24. For example, an LTE phone for use on Verizon's network would need to contain a multi-mode modem chip that complies with LTE standards in addition to 2G-CDMA and 3G-CDMA. *Id.* A handset that contains a multi-mode modem chip that complies with GSM, UMTS, and LTE standards, but not CDMA standards, could not be used on Verizon's network. *Id.*

iv. Cellular Handset Tiers and Smartphones

Cellular handsets are produced by original equipment manufacturers ("OEMs") such as Apple and Samsung. *Id.* ¶ 25. Since the late 2000s, handsets with advanced computing capability, known as smartphones, have emerged as alternatives to simple feature phones that support only

voice and text-message capability. *Id.* In addition to voice and text-message capability, smartphones include additional features such as "cameras, high-resolution touch-screen displays, powerful applications and graphic processors, and enhanced memory and storage." *Id.* ¶ 26. Smartphones generally offer consumers connectivity over cellular networks and Wi-Fi networks. *Id.*

Competition in the manufacturing and sale of handsets has developed over time into "tiers": premium, mid, and low. *Id.* ¶ 27. "Premium"-tier smartphones include brands such as Apple's iPhone and Samsung's Galaxy-S. *Id.* Premium smartphones are of particular importance to OEMs because they "tend to have higher prices and margins than lower-tier products and are important for branding." *Id.* ¶ 28.

Among the cellular communications standards discussed above, "LTE functionality is particularly important for modern smartphones." *Id.* ¶ 30. As discussed above, LTE allows for the transmission of large volumes of data, which has grown increasingly more important than cellular voice traffic. *Id.*

2. Qualcomm's Participation in the Modem Chip Market

Qualcomm is the leading supplier of modem chips worldwide. *Id.* ¶ 31. In particular, Qualcomm is dominant in the supply of two types of modem chips: (1) modem chips that comply with CDMA standards ("CDMA modem chips"); and (2) modem chips for use in premium tier handsets, which comply with advanced LTE standards ("premium LTE modem chips").

i. CDMA Chips

First, Qualcomm has been particularly dominant in the supply of CDMA modem chips. *Id.* ¶ 32. As set forth above, major carriers such as Verizon and Sprint have deployed CDMA networks. *Id.* Accordingly, for OEMs, "leaving CDMA-compatible handsets out of their product lines has not been a realistic option." *Id.* OEMs that wish to manufacture handsets to operate on CDMA networks such as Verizon and Sprint must use modem chips that comply with CDMA standards.

Qualcomm is the dominant supplier of CDMA modem chips. From at least 2006 through

September 2015, Qualcomm's worldwide share of CDMA modem chips exceeded 80%. *Id.* ¶ 33.

Qualcomm faces "limited competition for the supply of CDMA" modem chips. *Id.* ¶ 34. In the past ten years, "the only supplier of CDMA [modem chips] other than Qualcomm has been Via Technologies," a Taiwanese company. *Id.* However, Via Technologies has focused its sales on the lower-tier handset market, rather than the premium market. *Id.* This is partly because Via Technologies has not offered multi-mode modem chips "that combine CDMA functionality with either UMTS or LTE functionality." *Id.* In 2015, Intel Corporation ("Intel") acquired Via Technology's CDMA modem chip business. *Id.* However, "Intel has not yet commercialized a [modem chip] product that integrates" Via Technology's CDMA technology with "Intel's own multi-mode [modem chip] technologies." *Id.*

Another Taiwanese company, MediaTek Inc. ("MediaTek"), licensed technology from Via Technologies in late 2013 and began to offer CDMA modem chips in 2015. *Id.* ¶ 35. However, MediaTek has not offered multi-mode CDMA modem chips that are "suitable for use in flagship handsets." *Id.* Overall, MediaTek's sale of CDMA modem processors has been small. *Id.*

ii. Premium LTE Modem Chips

As discussed above, most cellular network operators have deployed LTE networks. *Id.* ¶ 38. This includes major U.S. cellular network operators such as Verizon, AT&T, T-Mobile, and Sprint. *Id.*

LTE functionality has continually advanced since the first LTE network was introduced in 2010. *Id.* ¶ 39. These advances have allowed for progressively faster data speeds. *Id.* Accordingly, "[a]s LTE technology has progressed, [modem chip] manufacturers have had to add features to keep up." *Id.* ¶ 40. For premium tier handsets, OEMs typically require modem chips with "advanced LTE functionality" that support advanced data download and upload speeds, in addition to other functions. *Id.* ¶¶ 40–41. For an OEM designing and manufacturing a premium tier handset, a modem chip that only supports earlier LTE technology is not a substitute for a modem chip that supports advanced LTE standards. *Id.* Accordingly, just as OEMs produce handsets in "tiers," competition among LTE modem chip manufacturers also occurs in tiers. *Id.* ¶

42.

Qualcomm has consistently been the dominant supplier of premium LTE modem chips. *Id.* ¶ 44. From at least 2012 through September 2015, Qualcomm's annual worldwide share of premium LTE modem chip sales has exceeded 80%. *Id.*

Qualcomm faces limited competition in the premium LTE modem chip market. *Id.* ¶ 45. Although other modem chip manufacturers offer modem chips that support LTE functionality, they offer limited competition in premium LTE functionality. *Id.* For example, MediaTek has not supplied premium LTE modem chips for premium-tier handsets, and MediaTek "has lagged behind Qualcomm in LTE [modem chip] sales." *Id.* Intel has "achieved modest success in premium LTE [modem chips] only recently, when [Intel] began to supply a portion of Apple's [modem chip] requirements for the iPhone 7." *Id.* Samsung and Huawei self-supply some premium LTE modem chips for use in Samsung and Huawei headsets, respectively, "but this has not provided Qualcomm with meaningful competition in the merchant market." *Id.* ¶

3. Qualcomm's Cellular Communications SEPs

In addition to supplying modem chips to OEMs, Qualcomm also has several patents that have been declared essential to cellular communications standards. *Id.* ¶¶ 53–55.

Qualcomm has participated in the cellular standard setting process through SSOs such as ETSI, TIA, and ATIS. *See* ¶ 54. Specifically, "Qualcomm was a leading developer and proponent of 2G-CDMA standards." *Id.* Qualcomm has "a correspondingly high share of all patents declared essential to 2G-CDMA standards." *Id.* Qualcomm also participated in 3G standard setting, though to a less significant degree. *Id.* ¶ 55. Qualcomm's "share of all patents declared essential to 3G-UMTS and 3G-CDMA standards is smaller than its share of 2G-CDMA SEPs." *Id.* Qualcomm's share of SEPs in LTE standards "is much lower" than Qualcomm's share of CDMA SEPs. *Id.* ¶ 56. Qualcomm's share of LTE SEPs "is roughly equal to the shares of other industry participants." *Id.* "One study of declared LTE SEPs found that Qualcomm had a 13% share of 'highly novel' essential LTE patents, compared to 19% for Nokia and 12% for each of Ericcson and Samsung." *Id.*

"Qualcomm has committed to ETSI, TIA, ATIS, and other SSOs that it will license its cellular SEPs" on FRAND terms. *Id.* ¶ 57. "Qualcomm's FRAND commitments require [Qualcomm] to license its [modem chip] competitors to make and sell [modem chips] using Qualcomm's SEPs." *Id.* ¶ 108. In practice, however, Qualcomm licenses its SEPs to OEMs, but Qualcomm "refuses" to license its SEPs to competing modem chip manufacturers. *Id.* ¶¶ 58, 112.

In licensing its SEPs to OEMs, Qualcomm collects a royalty rate of approximately 5% of the value of the net selling price of the handset. *Id.* ¶ 58. For example, if an OEM sells a handset that is priced at $600, Qualcomm will collect a $30 royalty for each sale. According to the FTC, "[a]mong SEP holders, Qualcomm garners an outsized share of licensing revenues paid by OEMs," and "OEMs pay Qualcomm far more in royalties than [OEMs] pay other SEP licensors, even those with comparable portfolios of cellular SEPs." *Id.* ¶ 60. Indeed, an analysis conducted by Qualcomm in 2015 showed that revenues from Qualcomm's licensing program were "'equivalent in size to the sum of [redacted] companies with a form of technology licensing,' including [redacted]." *Id.*

4. Qualcomm's Alleged Anticompetitive Conduct

FTC alleges that Qualcomm uses its dominance in the supply of CDMA and premium LTE modem chips to skew SEP licensing negotiations toward outcomes that benefit Qualcomm and harm Qualcomm's modem chip competitors. *Id.* ¶ 63. FTC alleges that Qualcomm does this through a course of conduct that includes three primary practices: (i) a "no license-no chips" policy; (ii) Qualcomm's refusal to license its SEPs to competing modem chip manufacturers; (iii) Qualcomm's exclusive dealing arrangements with Apple.

i. "No License-No Chips"

As discussed above, "Qualcomm's FRAND commitments require [Qualcomm] to license its [modem chip] competitors to make and sell [modem chips] using Qualcomm's SEPs." *Id.* ¶ 108. Nonetheless, Qualcomm refuses to license its SEPs to competing modem chip manufacturers. Thus, competing modem chip manufacturers cannot sell to OEMs modem chips "that convey the right to Qualcomm's cellular SEPs." *Id.* ¶ 113. Instead, Qualcomm licenses its

SEPs to only OEMs who make and sell handsets. *Id.* ¶¶ 58, 112. In licensing its SEPs to OEMs, FTC alleges that "Qualcomm conditions OEMs' access to [Qualcomm's] [modem chips] on OEMs' acceptance of a license to Qualcomm's cellular SEPs on Qualcomm's preferred terms." *Id.* ¶ 61. FTC calls this practice Qualcomm's "no license-no chips" policy. *Id.*

Through Qualcomm's modem chip supply agreements with OEMs, OEMs agree that (i) Qualcomm's modem chip supply agreements "convey no rights to intellectual property;" (ii) "that OEMs may use Qualcomm [modem chips] only in accordance with a separate patent license agreement with Qualcomm"; and (iii) "that Qualcomm may terminate supply [of modem chips] if the OEM defaults on its [patent] license agreement." *Id.* ¶ 62. Essentially, unless OEMs agree to take out a separate SEP licensing agreement with Qualcomm on Qualcomm's preferred terms, that covers all of the handsets that the OEM sells, Qualcomm will not supply the OEM with any Qualcomm modem chips. *Id.*

FTC alleges that Qualcomm's conduct is unique among modem chip suppliers and suppliers of other cellular-equipment components. *Id.* ¶ 64. "Other component suppliers rely on component sales, rather than separate patent licenses, to convey to their OEM customers the intellectual property rights that those customers need in order to use or resell the components they have purchased." *Id.* ¶ 65. "When a supplier sells a component, such as a [modem chip], to an OEM, that sale, under the doctrine of patent exhaustion, ordinarily terminates any right of the supplier under patent law to control any further use or sale of the component." *Id.* ¶ 66. "Thus, when one of Qualcomm's competitors sells a [modem chip] to an OEM, the OEM can use or resell the processor without obtaining a separate patent license from the competing modem chip supplier," "just as a consumer buying a smartphone does not have to obtain a separate patent license from the seller of the smartphone" to use the smartphone without infringing the patents that are practiced by that smartphone. *Id.* ¶ 67.

Among the hundreds of suppliers from which OEMs purchase handset components, "Qualcomm is unique in requiring an OEM, as a condition of sale, to secure a separate patent license requiring royalty payments for handsets that use a competitor's components." *Id.* ¶ 68.

In addition to setting Qualcomm apart from other component suppliers, FTC alleges that Qualcomm's "no license-no chips" policy is also unique among other licensors of SEPs. *Id.* ¶ 69. "Ordinarily, if a SEP holder and a potential licensee can neither agree on license terms nor agree to submit those terms to binding arbitration, the SEP holder initiates a patent-infringement suit in which a court resolves issues of patent validity and infringement and, if the court deems a patent valid and infringed, determines and awards reasonable royalties." *Id.* ¶ 70. "In some instances, a potential licensee may seek a declaratory judgment addressing the same issues." *Id.* The fact that a potential licensee can "secure a FRAND determination from a court affects SEP-license negotiations." *Id.* ¶ 72. "[T]he parties' expectations about the probable outcome of litigation determine the negotiated [FRAND] royalty terms. In this sense, bargaining over royalties and other licensing terms occurs 'in the shadow of the law.'" *Id.* ¶ 73.

However, this process does not happen with regards to negotiations of the royalty rates of Qualcomm's FRAND-encumbered SEPs. Although OEMs consider Qualcomm's "royalties as non-FRAND, and absent Qualcomm's 'no license-no chips' policy, OEMs would have the ability and incentive to challenge Qualcomm's royalty demands in court," FTC alleges that OEMs do not challenge Qualcomm's royalty terms because of Qualcomm's "no license-no chips" policy. *Id.* ¶ 76. Specifically, "[a]s a result of Qualcomm's [no license-no chips] policy, the costs that an OEM must incur to challenge Qualcomm's royalties are not simply attorney's fees and other litigation costs," but also "loss of access to Qualcomm [modem chips]." *Id.* ¶ 79. Losing access to Qualcomm's modem chips would be a substantial loss to OEMs given Qualcomm's dominant position "in the supply of CDMA and premium LTE [modem chips]." *Id.* ¶ 80. "[A]n OEM unable to purchase such [modem chips] from Qualcomm would be severely hampered in efforts to design and sell critically important premium-tier [handsets] and [handsets] for use on CDMA networks." *Id.*

Thus, "[t]o maintain access to Qualcomm's [modem chips], OEMs have accepted royalty and other license terms that they would not otherwise accept." *Id.* ¶ 86. Specifically, OEMs pay Qualcomm royalties that "do not reflect OEMs' assessments of patent royalties that a court or

neutral arbiter would deem reasonable, including in light of Qualcomm's FRAND commitments." *Id.* "Instead, the royalties that OEMs pay [Qualcomm for Qualcomm's SEPs] also reflect Qualcomm's dominant position in [modem chips], and include an added increment that OEMs pay Qualcomm to avoid disruption of [modem chip] supply." *Id.*

FTC calls this "added increment"—the incremental above-FRAND royalty that OEMs pay Qualcomm—a "tax." *Id.* ¶¶ 86–87. This "tax" raises an OEMs cost of purchasing any *modem chip* because OEMs consider the "all-in" cost of a modem chip as consisting of two components: (i) "the nominal price of the" modem chip itself, and (ii) "any patent royalties that the OEM must pay to use that [modem chip] in a handset." *Id.* ¶ 88. Qualcomm's "tax" raises the latter component—the patent royalties to use the modem chip in the handset—for every modem chip that an OEM buys, including the modem chips made by Qualcomm's competitors. *Id.* FTC alleges that "[t]he royalties that OEMs pay Qualcomm on handsets that contain competitors' [modem chips] are [redacted] *Id.* ¶ 92. FTC alleges that this has reduced competitors' margins, and "limited competitors' abilities to invest and innovate in next-generation technologies." *Id.* ¶ 93. Moreover, "Qualcomm has also limited competitors' ability to discipline the all-in prices that Qualcomm charges for [modem chips]." *Id.* ¶ 94.

FTC alleges that "Qualcomm executives recognize that [Qualcomm's] 'no license-no chips' policy requires OEMs to accept higher royalties than OEMs would otherwise accept." *Id.* ¶ 96. In a June 2015 internal presentation, the presentation "proposed that Qualcomm form a '5G Consortium' with major infrastructure-equipment manufacturers" wherein members of the consortium would not sell a product "to a carrier who is not licensed by the Consortium." *Id.* ¶ 97. "The internal presentation proposed that the consortium 'pursue licensing on a non-FRAND basis for SEPs'" because conditioning carrier access to equipment on the acceptance of a separate patent license "would 'Convinc[e] Carriers to Pay.'" *Id.* ¶ 98. This internal presentation "noted that Qualcomm 'employs this strategy today.'" *Id.* Qualcomm also pursued in 2015 an intensive review of "whether to divide Qualcomm's [modem chip] and licensing divisions into separate

companies." *Id.* ¶ 99. [redacted] Accordingly, Qualcomm did not divide up the company. *Id.* ¶ 101.

In addition, FTC alleges that "[o]n some occasions, Qualcomm has induced certain OEMs to accept its preferred license terms using *both* the 'stick' of threatened [modem chip] supply disruption and the 'carrot' of funds conditioned on the OEM's acceptance of Qualcomm's preferred [SEP licensing] terms." *Id.* ¶ 102 (emphasis added). "These funds" have, in some cases, "accrued based on OEMs' purchase of Qualcomm's [modem chips]." *Id.* ¶ 103. This helps "Qualcomm 'close the gap' with OEMs that resist license terms that [the OEMs] regard as unfair," and it helps Qualcomm "to maintain high royalties on handsets that use competitors' [modem chips]." *Id.* ¶ 104. Indeed, "[i]mplicitly acknowledging that these funds have allowed its licensing division (QTL) to induce certain OEMs to accept higher royalty rates, Qualcomm has [redacted] even though these funds accrue based on OEMs' purchase of Qualcomm modem chips. *Id.* ¶¶ 103–05.

ii. Qualcomm's Refusal to License its SEPs to Chip Competitors

As discussed briefly above, FTC alleges that Qualcomm refuses to license its FRAND-encumbered SEPs to competing modem chip manufacturers. Rather, Qualcomm licenses its SEPs only to OEMs who manufacture handsets. *Id.* ¶ 107. This, according to FTC, is in violation of Qualcomm's FRAND commitments, which "require [Qualcomm] to license to competitors to make and sell [modem chips] using Qualcomm SEPs." *Id.* ¶ 108. Although "[s]everal of Qualcomm's former and current competitors, including Intel, MediaTek, and Samsung, have sought SEP licenses from Qualcomm," Qualcomm has "refused to grant a SEP license" to its

modem chip competitors. *Id.* ¶ 112.

According to FTC, if Qualcomm licensed its modem chip competitors—as opposed to only OEMs—Qualcomm would not be able to use the threat of a disruption in supply of its modem chips to induce OEMs to agree to Qualcomm's preferred royalty terms. *Id.* ¶ 114. This is because, unlike OEMs who depend on Qualcomm for modem chip supply, competing modem chip manufacturers do not need modem chips from Qualcomm. *Id.* Thus, if Qualcomm licensed its SEPs to competing modem chip manufacturers, "the royalties that would emerge from [Qualcomm's licensing] negotiations [with competing modem chip manufacturers] would reflect the royalties that a court would deem reasonable." *Id.* According to FTC, "Qualcomm's refusal to license competing manufacturers of [modem chips], in contravention of its FRAND commitments, contributes to [Qualcomm's] ability to tax its competitors' [modem chip] sales," and thus maintain Qualcomm's modem chip monopoly. *Id.* ¶ 115.

iii. Qualcomm's Exclusive Deals with Apple

In addition to Qualcomm's "no license-no chips" policy and Qualcomm's refusal to license its SEPs to its competitors, FTC further alleges that Qualcomm has entered exclusive deals with Apple. *Id.* ¶ 116.

"Apple is a particularly important OEM from the perspective of a nascent [modem chip] supplier." *Id.* ¶ 129. Specifically, "Apple sells large volumes of premium handsets that require premium LTE" modem chips which "command higher prices" than lower-tier modem chips. *Id.* Moreover, Apple provides additional benefits to chip suppliers because modem chip suppliers for Apple learn from Apple's engineer teams, "can field-test its [modem chips] through global launches," and "obtain[] a reputational halo effect from selling to Apple" which helps a modem chip manufacturer win sales with other OEMs. *Id.*

FTC alleges that Apple has entered into *de facto* exclusive agreements with Qualcomm to use only Qualcomm's modem chips in Apple's flagship products. *Id.* ¶¶ 124–25. Specifically, although "Apple, like other OEMs, regards Qualcomm's license terms . . . as inconsistent with Qualcomm's FRAND commitments," *Id.* ¶ 118, "Apple has negotiated with Qualcomm in an

effort to reduce the royalty burden." *Id.* ¶ 119. Apple entered into agreements with Qualcomm in 2007, 2011, and 2013.

In 2007, "Qualcomm agreed to rebate to Apple royalties that Qualcomm received" from Apple that were "in excess of a specified per-handset cap." *Id.* ¶ 120. "Qualcomm's payment obligations [to Apple] were conditioned upon, among other things, Apple not selling or licensing a handset implementing" a prospective fourth-generation standard that was opposed by Qualcomm but championed by Intel, its competitor. *Id.*

In 2011, Qualcomm entered into an agreement with Apple through which "Qualcomm agreed to make substantial incentive payments [to Apple] from 2011 through 2016, explicitly conditioned upon Apple using Qualcomm [modem chips] exclusively in all new iPhone and iPad models." *Id.* ¶ 122. "If, during this period, Apple launched a new handset with a non-Qualcomm [modem chip], [Apple] would forfeit all future payments and, depending on when a handset launched, could be required to refund past payments." *Id.*

In 2013, Qualcomm entered into an agreement with Apple that "modified and extended the exclusivity arrangement set forth in the companies' 2011 agreement." *Id.* ¶ 123. Specifically, under the 2013 agreement, "Qualcomm agreed to rebate to Apple royalties" that Qualcomm collected "in excess of a modified per-hand set cap." *Id.* Qualcomm's agreement to do this was subject to a new condition: "that Apple neither initiate nor induce others to initiate litigation claiming that Qualcomm had failed to offer a license on FRAND terms." *Id.* Further, "Qualcomm also agreed to make substantial incentive payments in 2013, 2014, 2015, and 2016, explicitly conditioned on Apple sourcing [modem chips] for new iPad and iPhone models exclusively from Qualcomm." *Id.* If, during this period, Apple launched a new handset with a non-Qualcomm modem chip, Apple would forfeit all future incentive payments and could be required to refund past incentive payments. *Id.*

"In all, Qualcomm's 2011 and 2013 agreements with Apple provided for billions of dollars in conditional rebates from Qualcomm to Apple for [modem chip] sales from 2011 to 2016," which "effectively penalized Apple's use of any [modem chip] supplied by Qualcomm's

competitors." *Id.* ¶ 124.

According to FTC, "Qualcomm's 2011 and 2013 agreements with Apple were, and were intended by Qualcomm to be, *de facto* exclusive deals that were as effective as express purchase requirements that effectively foreclosed Qualcomm's competitors from gaining [modem chip] business at Apple." *Id.* ¶ 125. Although Apple had "an interest in developing and working with additional suppliers of [modem chips]," the "large penalties that Apple would face" from Qualcomm if it chose to source chips from another supplier "prevented Apple from using alternative suppliers" during the effective exclusivity period under the agreements. *Id.*; *see also id.* ¶ 125c (alleging penalties are sufficiently large that they effectively prevent other modem chip manufacturers from competing with Qualcomm to gain business from Apple).

As a result of Qualcomm's exclusive dealing arrangements with Apple, Apple sourced modem chips exclusively from Qualcomm for all iPad and iPhone products that Apple launched from October 2011 until September 2016. *Id.* ¶ 126. "Qualcomm's exclusive agreements with Apple prevented Qualcomm's competitors from attaining" the benefits that come from supplying modem chips to Apple. "These [exclusive] agreements also foreclosed a substantial share of the market for premium LTE [modem chips]" and "significantly impeded the development of other [modem chip] suppliers into effective competitors to Qualcomm." *Id.* ¶ 131.

B. Procedural History

FTC sued Qualcomm in this Court on January 17, 2017, and alleged that Qualcomm's course of conduct violated § 5 of the FTCA. ECF No. 1.

On April 3, 2017, Qualcomm moved to dismiss the Complaint. ECF No. 69 ("Mot."). On May 12, 2017, FTC opposed Qualcomm's motion. ECF No. 85 ("Opp.").

Also on May 12, 2017, ACT|The App Association, Samsung Electronics Co., Ltd., Intel Corporation, and the American Antitrust Institute, each filed motions for leave to file amicus curiae briefs in support of FTC's opposition. *See* ECF Nos. 90–95. On May 15, 2017, the Court granted the motions for leave to file amicus curiae briefs. ECF No. 95.

On June 2, 2017, Qualcomm filed its reply. ECF No. 120 ("Reply").

II. LEGAL STANDARD

A. Motion to Dismiss Under Rule 12(b)(6)

Pursuant to Federal Rule of Civil Procedure 12(b)(6), a defendant may move to dismiss an action for failure to allege "enough facts to state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. The plausibility standard is not akin to a 'probability requirement,' but it asks for more than a sheer possibility that a defendant has acted unlawfully." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (internal citation omitted).

For purposes of ruling on a Rule 12(b)(6) motion, the Court "accept[s] factual allegations in the complaint as true and construe[s] the pleadings in the light most favorable to the nonmoving party." *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008). However, a court need not accept as true allegations contradicted by judicially noticeable facts, *Shwarz v. United States*, 234 F.3d 428, 435 (9th Cir. 2000), and a "court may look beyond the plaintiff's complaint to matters of public record" without converting the Rule 12(b)(6) motion into one for summary judgment, *Shaw v. Hahn*, 56 F.3d 1128, 1129 (9th Cir. 2011). Mere "conclusory allegations of law and unwarranted inferences are insufficient to defeat a motion to dismiss." *Adams v. Johnson*, 355 F.3d 1179, 1183 (9th Cir. 2004).

B. Leave to Amend

If the Court concludes that a motion to dismiss should be granted, it must then decide whether to grant leave to amend. Under Rule 15(a) of the Federal Rules of Civil Procedure, leave to amend "shall be freely given when justice so requires," bearing in mind "the underlying purpose of Rule 15 . . . [is] to facilitate decision on the merits, rather than on the pleadings or technicalities." *Lopez v. Smith*, 203 F.3d 1122, 1127 (9th Cir. 2000) (citation omitted). Nonetheless, a district court may deny leave to amend a complaint due to "undue delay, bad faith or dilatory motive on the part of the movant, repeated failure to cure deficiencies by amendments previously allowed, undue prejudice to the opposing party by virtue of allowance of the

amendment, [and] futility of amendment." *See Leadsinger, Inc. v. BMG Music Publ'g*, 512 F.3d 522, 532 (9th Cir. 2008).

III. DISCUSSION

The FTC brings its complaint against Qualcomm under § 5 of the FTCA, which prohibits "[u]nfair methods of competition in or affecting commerce." 15 U.S.C. § 45(a).

"[U]nfair methods of competition" under the FTCA includes "violations of the Sherman Act." *Fed. Trade Comm'n v. Cement Inst.*, 333 U.S. 683, 693–94 (1948). In addition, the FTC under § 5 may "bar incipient violations of [the Sherman Act], and conduct which, although not a violation of the letter of the antitrust laws, is close to a violation or is contrary to their spirit." *E.I. du Pont de Nemours & Co. v. Fed. Trade Comm'n*, 729 F.2d 128, 136–37 (2d Cir. 1984) (internal citations omitted); *see also Fed. Trade Comm'n v. Brown Shoe Co.*, 384 U.S. 316, 321 ("This broad power of the [FTC] is particularly well established with regard to trade practices which conflict with the basic policies of the Sherman and Clayton Acts even though such practices may not actually violate these laws."). "The standard of 'unfairness' under the FTCA is, by necessity, an elusive one," and the precise contours of the FTC's authority under § 5 are not clearly defined. *Fed. Trade Comm'n v. Indiana Fed. of Dentists*, 476 U.S. 447, 454 (1986). However, the FTC's authority to proscribe "unfair methods of competition" under § 5 is not unbounded. *See E.I. du Pont de Nemours & Co.*, 729 F.2d at 137 ("When a business practice is challenged by the [FTC], even though, as here, it does not violate the antitrust or other laws and is not collusive, coercive, predatory or exclusionary in character, standards for determining whether it is 'unfair' within the meaning of § 5 must be formulated to discriminate between normally acceptable business behavior and conduct that is unreasonable or unacceptable.").

Here, FTC alleges that Qualcomm's conduct violates § 5 of the FTCA because Qualcomm's conduct violates both § 1 and § 2 of the Sherman Act. Compl. ¶ 147. FTC also alleges that, even if Qualcomm's conduct does not violate either § 1 or § 2 of the Sherman Act, Qualcomm's conduct nonetheless "constitute[s] unfair methods of competition in violation of [§ 5] of the FTCA." *Id.*

For the reasons discussed below, the Court agrees with FTC that FTC has adequately alleged that Qualcomm's conduct violates § 1 and § 2 of the Sherman Act, and thus FTC has adequately stated a claim under § 5 of the FTCA. Accordingly, the Court need not decide whether FTC has stated a claim for violation of § 5 that is independent of a Sherman Act violation. The Court first discusses the elements of an antitrust claim under § 1 and § 2 of the Sherman Act. The Court then addresses Qualcomm's alleged anticompetitive conduct.

A. Sections 1 and 2 of the Sherman Act

"Section 2 of the Sherman Act makes it unlawful for a firm to 'monopolize.'" *United States v. Microsoft Corp.*, 253 F.3d 34, 50 (D.C. Cir. 2001). "The offense of monopolization has two elements: '(1) the possession of monopoly power in the relevant market"; and (2) "the willful acquisition or maintenance of that power" through exclusionary conduct "as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.'" *Id.* (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966)); *see also McWane v. Fed. Trade Comm'n*, 783 F.3d 814, 828 (11th Cir. 2015) (applying these two elements in a case brought under § 5 of the FTCA). As the D.C. Circuit has explained, "to be condemned as exclusionary, a monopolist's act must have an 'anticompetitive effect,'" which means that the conduct "must harm the competitive *process* and thereby harm consumers." *Microsoft*, 253 F.3d at 58. "The [Sherman Act] directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 458 (1993).

"Section 1 of the Sherman Act, 15 U.S.C. § 1, prohibits [e]very contract, combination . . . or conspiracy, in restraint of trade or commerce among the several States." *Allied Orthopedic Appliances, Inc. v. Tyco Health Care Grp. LP*, 592 F.3d 991, 996 (9th Cir. 2010). "Unlike Section 2 claims, Section 1 restraint of trade claims need not establish the threshold showing of monopoly control over a relevant market." *Amarel v. Connell*, 102 F.3d 1494, 1552 (9th Cir. 1996). "To show a violation of § 1, a plaintiff 'must establish a contract, conspiracy or combination intended to restrain competition and which actually has an anticompetitive effect." *Id.* at 1551.

For purposes of the instant motion to dismiss, the § 1 and § 2 analysis are substantially identical.[2] *See* Reply at 16 ("FTC acknowledges that the same theories underlie its claims under both Section 1 and Section 2 of the Sherman Act"); *see also* Compl. ¶ 147. Qualcomm does not contest that FTC has adequately alleged that Qualcomm has "monopoly power" in the markets for CDMA and premium-LTE modem chips. *See generally* Mot. Rather, Qualcomm primarily contests only whether, under either § 1 or § 2 of the Sherman Act, FTC has adequately alleged that Qualcomm's conduct is anticompetitive, meaning that it "harm[s] the competitive *process* and thereby harm[s] consumers." *Microsoft*, 253 F.3d at 58.

FTC claims that Qualcomm has engaged in an anticompetitive course of conduct consisting of three primary anticompetitive practices. First, FTC alleges that Qualcomm has harmed competition through Qualcomm's "no license-no chips" policy with OEMs. Compl. ¶¶ 61–106. Second, FTC contends that Qualcomm has harmed competition by refusing to license its FRAND-encumbered SEPs to its rival chip manufacturers. *Id.* ¶¶107–15. Third, FTC alleges that Qualcomm has harmed competition by entering into de facto exclusive dealing arrangements with Apple. *Id.* ¶¶ 116–30.[3] The Court discusses each of these three practices in turn.

B. Qualcomm's "No License-No Chips" Policy

First, FTC asserts that Qualcomm has a "no license-no chips" policy that harms competition in the CDMA and premium-LTE modem chips market (hereinafter, for simplicity,

[2] Qualcomm argues briefly in its motion to dismiss that FTC cannot state a § 1 claim because FTC does not allege a "contract, conspiracy, or combination." Mot. at 21. In its opposition FTC states that the relevant agreements for purposes of its § 1 theories are Qualcomm's exclusive dealing arrangements with Apple, licensing terms with OEMs, and agreements to pay strategic funds. Opp. at 23. Thus, FTC has adequately alleged a "contract, conspiracy, or combination" sufficient for its § 1 theories. Qualcomm does not contest this in its Reply. *See* Reply at 16. Because the parties appear to agree on this issue, the Court need not discuss this element further for purposes of the instant motion to dismiss.

[3] Qualcomm analyzes FTC's allegations of incentive payments as a separate anticompetitive practice. *See* Mot. at 13–14. However, given the structure of the Complaint, the Court understands FTC's allegations of incentive payments to be only a component of Qualcomm's "no license-no chips" policy, rather than an independent business practice that FTC alleges is anticompetitive apart from Qualcomm's "no license-no chips" scheme. *Compare* Compl. ¶¶ 102–06 (discussing Qualcomm's incentive payments under the same heading as Qualcomm's "no license-no chips" policy), *with id.* ¶¶107–15; 116–20 (discussing Qualcomm's refusal to license its competitors and exclusive deals with Apple under separate headings).

"modem chips market"). Opp. at 16. Understanding Qualcomm's "no license-no chips" policy, and why FTC alleges that this policy is anticompetitive, involves understanding several interrelated practices of Qualcomm. Accordingly, the Court first recounts FTC's allegations regarding Qualcomm's "no license-no chips" policy. The Court then addresses Qualcomm's arguments for why FTC has failed to allege that this policy is anticompetitive.

1. No License, No Chips

As stated above, Qualcomm owns cellular communications patents that have been declared essential to certain cellular communications standards, including CDMA. Compl. ¶¶ 56–57. In exchange for having its patents declared essential to cellular communications standards, Qualcomm committed to SSOs that Qualcomm would license its SEPs on FRAND terms. *Id.* ¶ 57. As FTC alleges, "[b]y making a FRAND commitment, [Qualcomm] accept[ed] the benefits of participating in standards development and of seeking incorporation of its patented technologies into a standard, but agree[d] in exchange not to exercise any market power resulting from its patents' incorporation into that standard." *Id.* ¶ 50. However, as discussed further below, FTC alleges that Qualcomm has violated its FRAND commitments. *Id.* ¶¶ 59, 76–77. Specifically, FTC contends that Qualcomm has used its monopoly power in the modem chips market to distort SEP licensing negotiations, which has in turn harmed competition in the modem chips market and helped Qualcomm maintain its modem chips monopoly. *See id.* ¶¶ 37, 86–87.

An important component of Qualcomm's course of conduct, FTC alleges, is that Qualcomm "has consistently refused to license its cellular [SEPs] to its competitors" that compete with Qualcomm in the modem chips market to sell modem chips to OEMs, who manufacture handsets. *Id.* ¶ 3; *see also id.* ¶¶ 58–59, 108. Qualcomm refuses to license its competitors even though "Qualcomm's FRAND commitments require [Qualcomm] to license its competitors." *Id.* ¶ 108. "Because Qualcomm refuses to license [its] FRAND-encumbered SEPs to its competitors, these competitors cannot offer OEMs [modem chips] that convey the rights to Qualcomm's cellular SEPs." *Id.* ¶ 113.

As discussed further in Section III.C. *infra*, FTC contends that Qualcomm's refusal to

license its SEPs to its modem chips competitors is an independent Sherman Act violation because Qualcomm has an antitrust duty to deal with its modem chips competitors. *See* Opp. at 17–19. For purposes of the instant discussion, FTC contends that Qualcomm's refusal to license its competitors is an important step in Qualcomm's "no license-no chips" policy. Specifically, because Qualcomm violates FRAND and refuses to license its SEPs to its modem chips competitors, Qualcomm instead licenses its SEPs only to OEMs who make and sell handsets. *Id.* ¶ 58. This difference in licensing is important because, unlike Qualcomm's modem chips competitors, OEMs depend on Qualcomm for modem chips supply. *See id.* ¶¶ 79–81 , 114. Indeed, even if an OEM currently buys modem chips from Qualcomm's competitors, an OEM must necessarily buy at least *some* modem chips from Qualcomm because Qualcomm owns approximately 80% of the market for CDMA modem chips and approximately 80% of the market for premium-LTE modem chips. *Id.* ¶¶ 33, 44. Access to CDMA and premium-LTE modem chips is particularly important for OEMs, and thus access to Qualcomm modem chips is essential for OEMs to successfully make and sell handsets. *Id.* ¶¶ 33, 44.

FTC alleges that Qualcomm takes advantage of OEMs' need to obtain both modem chips and SEP licenses from Qualcomm. Specifically, FTC alleges that Qualcomm refuses to sell an OEM any Qualcomm modem chips unless the OEM agrees to Qualcomm's preferred SEP licensing terms. *Id.* ¶ 61. FTC calls this practice Qualcomm's "no license-no chips" policy. *Id.* FTC alleges that Qualcomm's threat to withhold modem chips causes OEMs to accede to royalty rates that are above-FRAND and "disproportionately high relative to the value contributed by [Qualcomm's] patented inventions." *Id.* ¶ 77. For example, under Qualcomm's licensing terms, Qualcomm collects a royalty that is a percentage of the handset's total price. *Id.* If two handsets both have the same cellular connection features, but one handset costs $300 more because it has more memory storage, Qualcomm will collect a higher royalty on the more expensive handset even though Qualcomm's SEPs did not contribute to the handset's higher price. In addition, "Qualcomm has required OEMs to grant Qualcomm cross-licenses," often "with pass-through rights to other OEMs," but Qualcomm "has failed to adjust its royalty rate to account for the value

of OEMs' cross-licensed patents." *Id.* FTC alleges that OEMs do not pursue litigation against Qualcomm over these royalty terms because the cost to OEMs of losing access to Qualcomm's modem chips during the course of litigation is too high. *Id.* ¶¶ 78–81.

In addition, FTC alleges that Qualcomm on occasion uses "both the 'stick' of threatened supply disruption and the 'carrot' of funds conditioned on the OEM's acceptance of Qualcomm's preferred terms." *Id.* ¶ 102. In effect, Qualcomm pays OEMs to accept Qualcomm's preferred licensing terms in order to "close the gap" in some licensing negotiations. *Id.* ¶¶ 102–06. These payments "have in some cases accrued based on OEMs' purchase of Qualcomm's [modem chips]." *Id.* ¶ 103. These payments help Qualcomm maintain its "no license-no chips" policy—and the above-FRAND royalties that result—across all of Qualcomm's licensing agreements with OEMs. *Id.*

According to FTC, the above-FRAND royalties that Qualcomm extracts from OEMs through Qualcomm's "no license-no chips" policy affects the markets for *modem chips* and harms competition in the modem chips market. Understanding why this is so requires, again, viewing the entire course of Qualcomm's conduct. As set forth above, Qualcomm violates FRAND and refuses to license its SEPs to competing modem chips manufacturers. *Id.* ¶ 108. As a result, Qualcomm's "competitors cannot offer OEMs [modem chips] that convey the rights to Qualcomm's cellular SEPs." *Id.* ¶ 113. If Qualcomm *did* license its SEPs to competing modem chips manufacturers, those modem chips manufacturers could sell licensed modem chips to OEMs and, under the doctrine of patent exhaustion, the OEM would obtain the right to use the patents practiced by those modem chips without having to pay Qualcomm a royalty on the sale of those modem chips.[4] *See id.* Instead, because Qualcomm refuses to license its modem chips competitors and licenses its SEPs only to OEMs who make and sell handsets, Qualcomm collects a royalty on *all* handsets sold by an OEM, regardless of whose components are in the handset. *Id.*

[4] To the extent Qualcomm argues that OEMs would still need a license from Qualcomm for Qualcomm patents that are not exhausted by a competitors' sale of modem chips, *see* Mot. at 17 n.14, neither the Complaint nor the motion discusses such patents.

¶ 68. In addition, as set forth above, because OEMs are, unlike Qualcomm's modem chips competitors, vulnerable to Qualcomm's threat to withhold modem chips, Qualcomm induces OEMs to pay *above-FRAND* royalties on every handset sold by the OEM. In sum, under Qualcomm's licensing terms, Qualcomm collects an above-FRAND royalty on *every* handset that is sold by an OEM, even if that handset contains modem chips made by a Qualcomm competitor. *See id.* ¶¶ 61–68.

This above-FRAND royalty that Qualcomm collects on every *handset* affects the market for *modem chips* because OEMs consider the "all-in" price for a modem chip as consisting of two components: "(i) the nominal price of the [modem chip]; and (ii) any patent royalties that the OEM must pay to use that [modem chip] in a handset." *Id.* ¶ 88. By extracting above-FRAND royalty payments from OEMs on every handset sold by OEMs, FTC alleges that Qualcomm has in effect raised the second component of the "all-in" price for a modem chip—the patent royalties that must be paid to use the modem chip—for *every* modem chip that the OEM buys, even if that modem chip is made by Qualcomm's competitor. *Id.* ¶¶ 88–95.

More specifically, FTC alleges, Qualcomm has raised the second component of the "all-in" price of a modem chip by an "added increment" that does not reflect the value of Qualcomm's FRAND-encumbered SEPs, but rather reflects Qualcomm's modem chips monopoly. *Id.* As FTC alleges, the SEP royalty payments that OEMs pay Qualcomm under Qualcomm's preferred royalty terms "include an added increment that OEMs pay Qualcomm to avoid disruption of [Qualcomm's modem chips] supply." *Id.* ¶ 86.

FTC labels this added above-FRAND increment a "tax" that Qualcomm collects from OEMs on every modem chip sale. *Id.* ¶ 87. However, an equally apt descriptor for this added above-FRAND increment is a "surcharge" that Qualcomm charges OEMs on every modem chip sale. Importantly, as discussed above, FTC alleges that this added surcharge does not reflect the value of Qualcomm's SEPs. *Id.* ¶ 86. Rather, OEMs pay this surcharge to Qualcomm only "to avoid disruption of [Qualcomm's modem chips] supply." *Id.* In effect, FTC contends that Qualcomm's "no license-no chips" policy means that the "all-in" price of *any* modem chip now

consists of (i) the nominal price of the modem chip itself, which the OEM must pay the modem chips manufacturer; (ii) a FRAND royalty, which the OEM must pay to Qualcomm to practice Qualcomm's SEPs; and (iii) an added surcharge, which the OEM must pay to Qualcomm in order to ensure continued access to Qualcomm's modem chips supply. *See id.* ¶¶ 83, 86, 87.

According to FTC, the surcharge that Qualcomm imposes on the sales of its rivals' modem chips is anticompetitive because it "reduces demand for competitors' processors," "reduce[s] competitors' sales and margins, and diminishe[s] competitors' ability and incentive of competitors to invest and innovate." *Id.* ¶¶ 87, 138. FTC further alleges that, as a result of Qualcomm's conduct, "[s]everal former competitors of Qualcomm have sold off or shuttered their [modem chips] business." *Id.* ¶ 139. Moreover, FTC contends, Qualcomm's conduct has "raise[d] handset prices paid by consumers." *Id.* ¶ 87.

Qualcomm contends, however, that the Complaint does not plausibly allege that Qualcomm's "no license-no chips" policy is anticompetitive. First, Qualcomm argues, FTC has failed to state a claim because the Complaint does not *actually* allege that Qualcomm's royalties are above FRAND. Mot. at 9–11. Second, and more fundamentally, Qualcomm contends that, even assuming Qualcomm charges an above-FRAND royalty, FTC has failed to adequately allege that Qualcomm's "no license-no chips" policy harms the competitive process for modem chips. *Id.* at 11–17. The Court addresses both of Qualcomm's argument below.

2. FTC Has Adequately Alleged Above FRAND Royalties

First, Qualcomm contends that FTC has failed to state a claim because a fundamental component of FTC's "no license-no chips" theory—that Qualcomm extracts from OEMs an above-FRAND royalty—is not adequately alleged in the Complaint. Mot. at 9. Specifically, Qualcomm contends that the Complaint "does not plead any facts purporting to show what Qualcomm's royalties should be or by how much they are purportedly 'elevated,'" and that the Complaint does not allege that "Qualcomm's royalty rates are *actually* unreasonable or above a FRAND level." *Id.* Moreover, Qualcomm asserts, FTC's allegations of above-FRAND royalties are contradicted by FTC's allegation that Qualcomm's royalty rate has stayed the same at 5%.

Finally, Qualcomm contends that FTC's allegations that Qualcomm offers some OEMs incentive payments to accept Qualcomm's preferred licensing terms contradicts FTC's allegations that Qualcomm uses the threat of withholding the supply of modem chips to induce OEMs to pay above-FRAND royalties. *Id.* at 10.

For the reasons discussed below, taking the allegations in the Complaint as true and "draw[ing] all reasonable inferences in favor of" FTC—as the Court must on a motion to dismiss, *Knevelbaard Dairies v. Kraft Foods, Inc.*, 232 F.3d 979, 984 (9th Cir. 2000) (internal quotation marks omitted)—the Court agrees with FTC that FTC has adequately alleged that Qualcomm's royalties are above FRAND.

a. The Complaint Adequately Alleges that Qualcomm's Royalties are Above FRAND

Contrary to Qualcomm's argument, the Complaint adequately pleads facts that "show what Qualcomm's royalties should be," and that Qualcomm's current royalties are above FRAND. Mot. at 9. As FTC explains in its Complaint, Qualcomm voluntarily participated in certain standards setting processes and, in exchange for having its patents incorporated into cellular communications standards, committed to SSOs that it would license its SEPs on FRAND terms. *See* Compl. ¶¶ 48–53. FTC's Complaint explains that "[m]ost SSOs neither prescribe FRAND license terms nor offer a centralized dispute-resolution mechanism," but rather "rely on the outcome of bilateral negotiations between the parties, with resort to remedies available from courts in the event of disagreement." *Id.* ¶ 51. Thus, parties negotiating royalty rates bargain "in the shadow of the law," and resort to remedies in court if those negotiations break down. *Id.* ¶¶ 70–73. FTC alleges that "[b]ilateral negotiations conducted in the shadow of judicial determination of FRAND terms are therefore essential to the efficacy of the FRAND commitment." *Id.* ¶ 51. Through bilateral negotiations conducted "in the shadow of the law," or a lawsuit itself, a FRAND royalty rate is determined. *See id.* ¶¶ 51, 69–75.

However, FTC alleges that, because of Qualcomm's "no license-no chips" policy, these two processes for determining a reasonable royalty rate are functionally foreclosed to OEMs.

Id.¶¶ 69–75. Critically, FTC alleges that because Qualcomm threatens to cut off an OEM's supply of chips if an OEM does not agree to Qualcomm's licensing demands, OEMs are effectively denied the opportunity to challenge Qualcomm's royalty terms in court. *Id.* ¶ 79. This is because "an OEM unable to purchase [modem chips] from Qualcomm" would, during the length of the litigation, be unable to sell "critically important premium-tier phones and phones for use on CDMA networks." *Id.* ¶ 80. Thus, "[a]s a result of Qualcomm's policy, the costs that an OEM must incur to challenge Qualcomm's royalties are not simply attorney's fees and other litigation costs, but also include loss of access to Qualcomm's [modem chips]." *Id.* ¶ 79.

Relatedly, because Qualcomm's "no license-no chips" policy prevents OEMs from resorting to a neutral arbiter to determine a reasonable royalty rate, an OEMs' bilateral licensing negotiations with Qualcomm do not occur "in the shadow of the law," and thus do not adequately reflect a reasonable FRAND royalty rate. *Id.* ¶¶ 70–73. Moreover, FTC alleges that although a reasonable royalty rate for Qualcomm's SEPs *could* be determined from Qualcomm's licensing negotiations with competing chip manufacturers, who "do not depend on Qualcomm for [modem chips] supply," Qualcomm refuses to license competing modem chip manufacturers. *Id.* ¶ 114. In effect, FTC alleges, a non-distorted metric for determining a FRAND royalty rate—a rate determined either through bilateral negotiations "in the shadow of the law," or a rate determined through litigation itself—currently does not *exist* because of Qualcomm's conduct. *See* ¶¶ 73, 75 78.

Significantly, FTC alleges that if these metrics *were* available to OEMs, Qualcomm's current royalty rates would *not* be the rates reached. Specifically, FTC alleges that "the royalties that OEMs pay Qualcomm . . . do not reflect OEMs' assessments of patent royalties that a court or neutral arbiter would deem reasonable," but rather "include an added increment that OEMs pay Qualcomm to avoid disruption of [modem chip] supply." *Id.* ¶ 86. FTC alleges that, if given the opportunity, "OEMs could challenge Qualcomm's royalty demands [before a court] on several grounds." *See id.* ¶¶ 77, 86. For example, OEMs would argue that "Qualcomm's royalties are disproportionately high relative to the value contributed by [Qualcomm's] patented inventions,"

and that they are often "several times higher than the royalties of other SEP licensors that have made similar contributions." *Id.* ¶ 77. Further, OEMs would argue that Qualcomm has incorrectly "continued to calculate royalties as a percentage of the handset's price, even though handsets today offer a number of features" that are unrelated to cellular connectivity. *Id.*

In addition, the Complaint contains numerous other allegations that, considered with the allegations discussed above, adequately allege that Qualcomm's royalties are above-FRAND. For example, FTC alleges that Qualcomm's royalties are "significantly higher than those of other licensors of cellular SEPs," *id.* ¶ 58, and that Qualcomm's royalties are "equivalent in size to the sum of [redacted] companies with a form of technology licensing," including "[redacted]," *id.* ¶ 60. This is so despite the fact that Qualcomm's "share of patents declared essential to LTE standards is much lower than its share of CDMA SEPs and is roughly equal to the shares of other industry participants." *Id.* ¶ 56. Indeed, "[o]ne study of declared LTE SEPs found that Qualcomm had a 13% share of 'highly novel' essential LTE patents, compared to 19% for Nokia and 12% for each of Ericsson and Samsung." *Id.* Further, the Complaint describes Qualcomm's royalties as "elevated" in several places, and FTC further alleges that "[a]bsent Qualcomm's unlawful conduct, Qualcomm's patent licenses would include fair, reasonable, and non-discriminatory terms, and would not include elevated royalties." *See id.*¶¶ 3, 7, 143. Finally, FTC also alleges that Qualcomm recognizes that its licensing practices "require[] OEMs to accept higher royalties than OEMs would otherwise accept," including "licensing on a non-FRAND basis for SEPs." *Id.* ¶¶ 96–98. In sum, reading the FTC's allegations as a whole, the Court finds that the Complaint plausibly alleges that Qualcomm's royalty rates are above FRAND.

Qualcomm contends that FTC's allegations of above-FRAND royalties are nonetheless contradicted by the fact that the Complaint also alleges that Qualcomm has historically collected a royalty rate of 5%, and that this rate has not changed over time. Mot. at. 10. However, FTC's allegation that Qualcomm has continued to collect the *same* 5% royalty on the total value of a handset *supports*, rather than contradicts, the FTC's allegations that Qualcomm's royalty is above

FRAND. As the Complaint explains, early handsets were primarily used only to transmit voice calls. *See id.* ¶¶ 19, 25. Accordingly, Qualcomm's cellular communications SEPs contributed significantly to the functionality and value of a 2006 handset. *See id.* By contrast, handsets today contain numerous features that are unrelated to cellular network connectivity, such as cameras, Wi-Fi access, and data storage. *Id.* ¶ 26. "Many consumers today use their smartphone as their principal camera, for example." *Id.* Thus, Qualcomm's SEPs contribute far less to the value of a 2017 phone as they contributed to the value of a 2006 phone. *See id.* ¶ 77. Nonetheless, Qualcomm continues to collect a 5% royalty from the *total* value of the handset today for Qualcomm's cellular communications SEPs, just as Qualcomm did a decade ago.

In addition, FTC alleges that Qualcomm has continued to earn the same 5% royalty on the sale of a handset despite the fact that Qualcomm's SEP portfolio has declined throughout cellphone standard generations. Qualcomm "held a correspondingly high share of all patents declared essential to 2G-CDMA standards," *id.* ¶ 54, but Qualcomm's "share of patents declared essential to LTE standards is much lower than its share of CDMA SEPs and is roughly equal to the shares of other industry participants" such as Nokia, Ericsson, and Samsung. *Id.* ¶ 56. Nonetheless, as discussed above, "revenues from Qualcomm's licensing program are 'equivalent in size to the sum of [redacted] companies with a form of technology licensing," despite Qualcomm's increasingly diminished role. *See id.* ¶ 60. In short, that Qualcomm collects the *same* 5% royalty on the total value of a 2017 smartphone as Qualcomm collected on the total value of a 2006 phone, despite the fact that both handset technology and Qualcomm's SEP portfolio has changed dramatically over the past decade,[5] supports FTC's allegations that Qualcomm's SEP royalty rates are above FRAND.[6]

[5] In addition, FTC alleges that Qualcomm's 5% royalty rate does not vary across OEMs, and thus does not account for the values of the different OEMs' patent cross licenses to Qualcomm. Compl. ¶ 77.

[6] Similarly, it is inconsequential that Qualcomm's 5% royalty rate does not vary depending on the modem chip at issue and whether Qualcomm has market power over that particular modem chip. *See* Mot. at. 10. FTC alleges that Qualcomm has used its monopoly in CDMA and premium-LTE modem chips to collect an above-FRAND royalty on *all* modem chips. *See* Compl. ¶144.

In sum, taking the Complaint's allegations as true and making reasonable inferences in FTC's favor, the Complaint adequately alleges that Qualcomm's royalty rates are above FRAND.

b. FTC's Allegations of Incentive Funds do not Contradict FTC's Allegations of Above-FRAND Royalties

Qualcomm also contends that FTC's allegations that Qualcomm offers some OEMs the "carrot" of incentive funds renders implausible FTC's allegations that Qualcomm uses the threat of withheld chip supply to coerce OEMs to accept above-FRAND royalties. Mot. at 10. According to Qualcomm, if FTC alleges that OEMs agree to above-FRAND royalties and do not challenge Qualcomm's licensing terms only because the OEMs fear that Qualcomm will disrupt their chip supply, it cannot *also* be true that some OEMs "do push back against Qualcomm's desired royalty terms," which necessitates that Qualcomm *pay* these OEMs to accept elevated royalties. *Id*. at 10–11.

Again however, Qualcomm's argument requires drawing inferences in favor of Qualcomm, as opposed to FTC. FTC alleges that Qualcomm, on certain occasions, "use[s] *both* the 'stick' of threatened supply disruption and the 'carrot' of funds conditioned on the OEM's acceptance of Qualcomm's preferred terms." *Id.* ¶ 102 (emphasis added). In effect, FTC alleges, if Qualcomm's initial threat of withholding chips does not get OEMs to accept the full terms that Qualcomm desires on all occasions, Qualcomm "close[s] the gap" by offering the OEMs "strategic funds" that accrue "based on OEMs' purchase of Qualcomm's [chips]." *Id.* ¶ 103–04. Significantly, FTC alleges that these "strategic funds" are thus a way for Qualcomm to continue and maintain its "no license-no chips" policy consistently across all OEMs. *Id.* ¶ 104. As FTC contends, that Qualcomm has the power to offer "carrots" on some occasions does not contradict FTC's central allegation, which is that Qualcomm primarily uses the "stick" of threatened modem chips supply disruption to induce OEMs to agree to Qualcomm's above-FRAND licensing terms. *See id.* ¶ 105; *see also ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 282–83 (3d Cir. 2012) (finding anticompetitive conduct where a dominant supplier both threatened OEMs that it would back out of supply agreements if the OEMs did not meet market share targets, *and* offered the OEMs

rebates for meeting the market share targets). Taking FTC's allegations as true, Qualcomm's incentive payments do not contradict the other allegations in the Complaint.

To summarize, the Complaint plausibly alleges that Qualcomm, through its "no license-no chips" policy, induces OEMs to pay Qualcomm above-FRAND royalties for Qualcomm's SEPs. Accordingly, the Court next turns to Qualcomm's argument that, even assuming Qualcomm charges an above-FRAND royalty, FTC has nonetheless failed to allege that Qualcomm's conduct has harmed the competitive process in the market for modem chips.

3. FTC Has Adequately Alleged that Qualcomm's "No License-No Chip" Policy Harms the Competitive Process

Next, the Court addresses Qualcomm's argument that, even assuming that Qualcomm collects an above-FRAND royalty, FTC has failed to state a claim under either § 1 or § 2 of the Sherman Act, and thus § 5 of the FTCA, because FTC has failed to adequately allege that Qualcomm's "no license-no chips" policy is anticompetitive. As discussed above, in order to state a Sherman Act claim, FTC must adequately allege that Qualcomm's "no license-no chips" policy has "harm[ed] the competitive *process* and thereby harm[ed] consumers." *Microsoft*, 253 F.3d at 58. As the Ninth Circuit has explained, "[a]nticompetitive conduct is behavior that tends to impair the opportunities of rivals and either does not further competition on the merits or does so in an unnecessarily restrictive way." *Cascade Health Solus. v. PeaceHealth*, 515 F.3d 883, 894 (9th Cir. 2008) (citing *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 n. 32 (1985)).

Qualcomm makes two primary arguments for why FTC has failed to allege that Qualcomm's "no license-no chips" policy is anticompetitive. First, Qualcomm contends that FTC has alleged only that Qualcomm has raised *all* modem chip prices *equally* across the board. According to Qualcomm, an across-the-board price increase cannot cause OEMs to favor Qualcomm's modem chips over those of Qualcomm's competitors. *See* Mot. at 11. Second, Qualcomm contends that FTC's argument is, at most, a "price squeeze" theory that is foreclosed by the United States Supreme Court's opinion in *Pacific Bell Telephone Co. v. linkLine*

Communications, Inc., 555 U.S. 438, 449 (2009). The Court addresses each of Qualcomm's arguments below.

a. FTC Has Adequately Alleged That Qualcomm's "No License-No Chips" Policy Harms Competition

First, Qualcomm contends that FTC has failed to allege that Qualcomm's "no license-no chips" policy is anticompetitive because FTC fails to explain how Qualcomm's "no license-no chips" policy harms competition in the modem chips market. *See* Mot. at 11. Specifically, Qualcomm contends that, if the "all-in" price for a modem chip is (i) the price of the modem chip, and (ii) any royalties that must be paid for any SEPs that are practiced through use of the modem chip, then FTC's allegations show only that Qualcomm has raised the latter component in *equal measure* across all modem chips sales. Mot. at 11. Accordingly, Qualcomm contends, if Qualcomm has raised *all* modem chips prices equally, Qualcomm's conduct cannot harm *competition* for modem chips sales. *Id.*

However, Qualcomm's argument requires accepting Qualcomm's own labels for its conduct—labels that FTC alleges do not reflect reality—and it requires drawing inferences in Qualcomm's favor, which the Court may not do on a motion to dismiss. *See Knevelbaard Dairies*, 232 F.3d at 984. In addition, Qualcomm's argument requires examining each of Qualcomm's practices independently, as opposed to considering their interactions and combined effect. As the Ninth Circuit has stated, however, "it is not 'proper to focus on specific individual acts of an accused monopolist while refusing to consider their overall combined effect.'" *Free FreeHand Corp. v. Adobe Sys., Inc.*, 852 F. Supp. 2d 1171, 1180 (N.D. Cal. Feb. 10, 2012) (quoting *City of Anaheim v. S. Cal. Edison Co.*, 955 F. 2d 1373, 1376, 1378 (9th Cir. 1992)). For the reasons discussed below, taking FTC's allegations as true and considering the interactions between Qualcomm's practices and their combined effect, the Court finds that FTC has adequately alleged that Qualcomm's "no license-no chips" policy has harmed competition in the modem chips market in violation of the Sherman Act, and thus in violation of § 5 of the FTCA.

According to the Complaint, Qualcomm uses the threat of withheld modem chips supply to induce OEMs to enter into SEP licensing agreements with Qualcomm that require the OEMs to

pay above-FRAND royalties for Qualcomm's FRAND-encumbered SEPs. *See* Compl. ¶¶ 83, 86. As FTC alleges, the royalty that OEMs pay to Qualcomm includes not only a FRAND royalty, but also an "added increment" that OEMs pay to Qualcomm "[t]o maintain access to Qualcomm's [modem chips]." *Id.* ¶ 86. Significantly, although this surcharge—or, in FTC's words, "tax"— is *labeled* as part of the royalty payment that OEMs pay to Qualcomm for Qualcomm's SEPs, FTC alleges that this surcharge does not reflect the fair value of Qualcomm's SEPs. *Id.* ¶¶ 4, 86. Rather, the surcharge is paid by OEMs "[t]o maintain access to Qualcomm's [modem chips]." *Id.* ¶ 86.

Of course, if Qualcomm merely added a surcharge to its *own* "all-in" modem chips price, competitors would underbid Qualcomm in the market for modem chips. *See id.* ¶ 88–90. Qualcomm's modem chips surcharge works because Qualcomm *also* "rais[es] OEMs' all-in costs of using competitors'" modem chips by the same amount. *See id.* Specifically, as set forth above, although Qualcomm's voluntary FRAND commitments require Qualcomm to license its SEPs to competing modem chips manufacturers, Qualcomm refuses to license its modem chips competitors. *Id.* ¶ 59. As a result, Qualcomm's modem chips rivals cannot sell OEMs licensed modem chips that convey the rights to Qualcomm's SEPs. *Id.* ¶ 114. Instead, Qualcomm licenses only OEMs who make and sell handsets, and these licensing agreements cover all of the handsets that the OEM sells, regardless of which company manufactured the components in that handset. *Id.* ¶¶ 64–68. In this way, Qualcomm collects its surcharge—the incremental above-FRAND royalty that OEMs pay to Qualcomm to ensure continued access to Qualcomm modem chips—on *all* handset sales. *Id.*

Thus, by violating its FRAND obligations twice over—by not licensing its competitors and by threatening to withhold its chips to induce OEMs to pay an above-FRAND royalty rate—Qualcomm raises the "all-in" modem chip price that OEMs pay on *all* modem chips. FTC alleges that this "weakens the competitive constraint on Qualcomm's own all-in [modem chips] price," which allows Qualcomm to charge OEMs its modem chips surcharge without spurring substitution in the modem chips market. *Id.* ¶¶ 89–90. Accordingly, FTC alleges, Qualcomm gives itself a

competitive advantage in the market for modem chips—a competitive advantage that is unrelated to Qualcomm's "superior product, business acumen, or historic accident." *Grinnell*, 384 U.S. at 571.

Significantly, although Qualcomm nominally imposes the same surcharge on all modem chips sales, Qualcomm's surcharge does not affect Qualcomm and its competitors equally. For Qualcomm, as discussed above, Qualcomm's surcharge is a means for Qualcomm to functionally extract a higher price for Qualcomm's own modem chips without being underbid in the modem chips market by competing modem chips manufacturers. *See* Compl. ¶¶ 86, 85–95. The revenue from Qualcomm's surcharge comes back to Qualcomm as a form of profit, and it maintains Qualcomm's modem chips monopoly. Moreover, Qualcomm can offer OEMs incentive payments that provide OEMs discounts from Qualcomm's above-FRAND royalties if an OEM uses Qualcomm's modem chips as opposed to the modem chips of Qualcomm's competitors. *Id.* ¶ 103. Qualcomm's competitors, by contrast, cannot offer OEMs such incentive payments, and Qualcomm's surcharge works to reduce competitors' modem chips sales and margins, which prevents these competitors from effectively competing with Qualcomm. *See id.* ¶ 106. In effect, FTC alleges, Qualcomm's surcharge "artificially stunt[s]" its competitors' ability to effectively grow and challenge Qualcomm on the merits, in violation of the Sherman Act. *McWane*, 783 F.3d at 824, 839–40; *see also United States v. Dentsply Intern., Inc.*, 399 F.3d 181, 191 (3d Cir. 2005) (finding monopolist's actions anticompetitive where the monopolist's conduct "help[ed] keep sales of competing [products] below the critical level necessary for any rival to pose a real threat to [the defendant's] market share").

The Seventh Circuit's decision in *Premier Electrical Construction Company v. National Electrical Contractors Association*, 814 F.2d 358 (7th Cir. 1987), demonstrates how a monopolist can use an across-the-board price increase to impose artificial constraints that disproportionately harm the monopolist's competitors. In *Premier*, an association of electrical employers known as the National Electrical Contractors Association ("the Association") established a fund with an electrical workers' union ("the Union"). *Id.* at 359. Members of the Association contributed 1%

of their gross payroll into the Fund to offset the cost of collective bargaining and administrative services. *Id.* at 359–60. However, because electrical employers who were *not* members of the Association were "free of the 1% contribution," these electrical employers "had lower costs of doing business" and could charge lower prices. *Id.* at 368. Electrical employers who were not members of the Association thus began to underbid the Association's members for electrical contracting work. *Id.* To prevent being underbid, the Association "enlisted the Union" to collect the 1% fee from non-Association electrical employers as well. *Id.* In this way, the Association "leveled" the playing field, but in doing so gave itself an advantage. "The result was higher prices to purchasers of electrical work and higher profits for members of the Association—both because there is more in the Fund, for the Association's use, and because the reduction in competition enabled the members to capture more of the market." *Id.* at 368.

Although the Association in *Premier* charged the 1% fee directly to its rivals—whereas Qualcomm's surcharge raises the price an OEM must pay for Qualcomm's rivals' modem chips—the result is substantially the same. Qualcomm functionally charges OEMs more to access Qualcomm's own modem chips by threatening to withhold its modem chips supply from OEMs unless they agree to Qualcomm's preferred SEP licensing terms. Compl. ¶ 86. Qualcomm ensures that it can charge this price while not being underbid by competitors—and thus maintain its modem chips monopoly—by *also* requiring OEMs to pay the same amount of money to Qualcomm *even if* those OEMs use modem chips from a competing modem chips manufacturer. *Id.* To Qualcomm, the surcharge represents "higher profits," both because the surcharge brings additional revenue to Qualcomm, and "because the reduction in competition enable[s]" Qualcomm "to capture more of the [modem chips] market." *Premier*, 814 F.2d at 368. To Qualcomm's modem chips competitors, however, the surcharge represents an *additional* component of the "all-in" price that an OEM must pay for use of the rivals' modem chips. Compl. ¶ 87. Thus, Qualcomm's surcharge represents an additional burden on the rival chipmaker that "diminishes OEMs' demand for those" modem chips and reduces competitors' sales. *Id.* ¶¶ 87, 89. It also "reduces the ability and incentive of competitors to invest and innovate." *Id.* ¶ 87.

Taking these factual allegations as true, FTC has adequately alleged that Qualcomm has engaged in "behavior that tends to impair the opportunities of rivals and either does not further competition on the merits or does so in an unnecessarily restrictive way." *Cascade*, 515 F.3d 883, 894 (9th Cir. 2008); *see Apple Inc. v. Samsung Elecs. Co., Ltd.*, 2011 WL 4948567, at *6 (N.D. Cal. Oct. 18, 2011) (finding plaintiff had plausibly alleged harm to competition where the plaintiff alleged that the defendant's conduct "result[ed] in increased prices and decreased quality and innovation"). Although Qualcomm insists that its licensing practices are justified, *see* Mot. at 8, "the existence of valid business reasons in antitrust cases is generally a question of fact not appropriate for resolution at the motion to dismiss stage," *Tucker v. Apple Comp., Inc.*, 493 F. Supp. 2d 1090, 1001 (N.D. Cal. 2006). In sum, at this stage of the litigation, FTC has alleged facts sufficient to support a plausible theory of harm to competition. The Court thus turns to whether FTC's claim is nonetheless foreclosed by the United States Supreme Court's decision in *linkLine*, 555 U.S. 438.

b. *linkLine* Does Not Foreclose FTC's Claim

Qualcomm contends that, even assuming that its "no license-no chips" policy affects Qualcomm's modem chips rivals differently than it affects Qualcomm, FTC has nonetheless still failed to state a claim because FTC has alleged, at most, a "price squeeze" theory that is foreclosed by the United States Supreme Court's decision in *linkLine*. However, as discussed further below, FTC's theory is not foreclosed by *linkLine* because FTC has alleged that Qualcomm has an antitrust duty to deal with its competitors, and because Qualcomm's conduct is distinguishable from the conduct at issue in *linkLine*. The Court first discusses the *linkLine* decision, and then addresses Qualcomm's argument.

In *linkLine*, AT&T "own[ed] much of the infrastructure and facilities needed to provide DSL [internet] service in California." *Id.* at 442. Accordingly, competing DSL providers needed to gain access to AT&T's facilities in order to provide DSL services to their own customers. *Id.* AT&T provided DSL transport service to its competitors at the wholesale level, and AT&T also provided DSL internet service directly to consumers at the retail level. *Id.* at 443. AT&T's

competitors sued AT&T under the Sherman Act, and alleged a "price squeeze" theory. *Id.* at 443–44. As the United States Supreme Court explained, a "price squeeze" theory "requires the defendant to be operating in two markets, a wholesale ("upstream") market and a retail ("downstream") market." *Id.* at 449. "A firm with market power in the upstream market can squeeze its downstream competitors by raising the wholesale price of inputs while cutting its own retail prices." *Id.* "This will raise competitors' costs (because they will have to pay more for their inputs) and lower [competitors'] revenues (because they will have to match the dominant firm's low retail price)." *Id.* The United States Supreme Court in *linkLine* considered "whether a plaintiff can state a price-squeeze claim when the defendant has no obligation under the antitrust laws to deal with the plaintiff at wholesale." *Id.* The United States Supreme Court concluded that the plaintiff could not. *Id.*

The United States Supreme Court held that AT&T did not have an antitrust duty to deal with its rivals at the wholesale DSL transport level. *Id.* at 450. Thus, AT&T had "no obligation to deal under terms and conditions favorable to its competitors" and "was not required to offer [its DSL transport service] at the wholesale prices the plaintiffs would have preferred." *Id.* at 450–51. Moreover, the United States Supreme Court explained, AT&T's DSL internet prices at the retail level were lawful because they were not predatory. *Id.* at 451. Because AT&T's actions at the wholesale level were lawful, and because AT&T's prices at the retail level were lawful, the United States Supreme Court explained that the *combination* of these two lawful actions did not violate the Sherman Act. *Id.* at 452. In sum, the United States Supreme Court held that it was not anticompetitive for AT&T to "squeeze" its competitors' margins by charging a high price to its competitors for inputs while maintaining above-cost pricing for AT&T's competitive retail product. *Id.* at 452.

Qualcomm argues that the FTC's allegations of Qualcomm's "no license-no chips" policy are, at bottom, a "price squeeze" theory. According to Qualcomm, FTC is functionally arguing that Qualcomm is charging "too much" for its royalties and "too little" for its modem chips, thereby "squeezing" its modem chip rivals' margins. However, for several reasons, *linkLine* does

not apply to FTC's claim.

First, the United States Supreme Court's holding in *linkLine* was explicitly premised on the fact that AT&T had "no duty to deal" with its competitors at wholesale. *linkLine*, 555 U.S. at 449. Here, as discussed in detail in Section III.C. *infra*, FTC has adequately alleged that Qualcomm *does* have an antitrust duty to license its SEPs to rival modem chips manufacturers. FTC alleges that if Qualcomm licensed its SEPs to competing chips manufacturers, Qualcomm would not be able to charge "too much" for its SEPs, either to OEMs or to its modem chips competitors, and thus Qualcomm's entire course of anticompetitive conduct would collapse. Compl. ¶ 113–15. Accordingly, Qualcomm's antitrust duty to deal with competing chips manufacturers, discussed in full in Section III.C below, distinguishes FTC's claim from *linkLine*, and *linkLine* does not apply. *See Safeway Inc. v. Abbott Labs.*, 2010 WL 147988, at *4 (N.D. Cal. Jan. 12, 2010) (distinguishing *linkLine* and allowing case to go forward because the plaintiff adequately alleged that the defendant had an antitrust duty to deal with its competitors).

Second, the United States Supreme Court in *linkLine* held that AT&T's lawful prices at the wholesale level and AT&T's lawful prices at the retail level did not become unlawful merely because the two prices, which were separate and distinct from one another, worked to "squeeze" the margins of AT&T's competitors when considered in relation to one another. *Id.* at 452. As courts have recognized, *linkLine* did not address allegations of an "overarching anticompetitive scheme." *Universal Hosp. Servs., Inc. v. Hill-Rom Holdings, Inc.*, 2015 WL 6994438, at *6 (W.D. Tex. Oct. 15, 2015) (distinguishing *linkLine* and holding that *linkLine* does not require courts to consider the components of an alleged anticompetitive scheme "in the disjunctive"). Here, Qualcomm's SEP licensing prices and Qualcomm's modem chips prices are not separate and distinct from one another, as AT&T's wholesale prices and retail prices were in *linkLine*. Rather, FTC alleges that Qualcomm's SEP licensing practices and Qualcomm's modem chips practices are inextricably intertwined with one another, and that both of these practices are central components of Qualcomm's overall anticompetitive "no license-no chips" policy. *See* Compl. ¶¶ 86–106. *linkLine* did not address this type of inextricably intertwined conduct and overarching

anticompetitive policy, and thus *linkLine* does not foreclose FTC's "no license-no chips" claim.

4. Summary

In sum, the Court finds that FTC has adequately alleged that Qualcomm's "no license-no chips" policy results in OEMs paying Qualcomm an above-FRAND royalty for Qualcomm's SEPs, and that Qualcomm's "no license-no chips" policy harms the competition in the market for modem chips. Accordingly, FTC has plausibly alleged that Qualcomm's "no license-no chips" policy is anticompetitive conduct in violation of either § 1 or § 2 of the Sherman Act, and thus in violation of § 5 of the FTCA. The Court next turns to consider whether Qualcomm's refusal to license its rivals constitutes independent anticompetitive conduct that violates the antitrust laws.

C. Qualcomm's Refusal to License its Competitors

Next, FTC alleges that Qualcomm's refusal to license its SEPs to its competing modem chips manufacturers violates an antitrust duty to deal because Qualcomm's FRAND obligations and larger anticompetitive course of conduct create an antitrust duty to deal with Qualcomm's competitors. Compl. ¶ 107; Opp. at 17–19. Qualcomm argues, however, that it has no antitrust duty to assist its rivals, even assuming that its FRAND obligations require Qualcomm to license its SEPs to its rivals. Mot. at 15.

For the reasons discussed below, the Court agrees with FTC that, under the circumstances presented here, FTC has adequately alleged that Qualcomm's refusal to license its SEPs to competing modem chips manufacturers and Qualcomm's larger course of anticompetitive conduct constitute a violation of an antitrust duty to deal, and thus a violation of § 2 of the Sherman Act and, by extension, § 5 of the FTCA. The Court first discusses the antitrust duty to deal doctrine, and then the Court addresses FTC's allegations.

a. Antitrust Duty to Deal

The United States Supreme Court has explained that, in general, "there is no duty to aid competitors." *Verizon Comm's, Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398, 411 (2004). Nonetheless, "[u]nder certain circumstances, a refusal to cooperate with rivals can constitute anticompetitive conduct and violate § 2." *Id.*

One such circumstance is the circumstance recognized in *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985). In *Aspen Skiing*, the defendant owned three of the four ski resorts in Aspen, Colorado, and the plaintiff owned the fourth resort. *Id.* at 585. The defendant and the plaintiff had, for many years, offered skiers a joint "all-Aspen ticket" that gave skiers admission to all four resorts. *Id.* at 589–90. Revenues from the joint ticket were divided according to the relative percentage of skiers that visited each mountain with the joint ticket. *Id.* at 589. Believing that it could get greater revenues without the joint ski pass, the defendant offered the plaintiff "an offer that [the plaintiff] could not accept." *Id.* at 592. Essentially, the defendant would only agree to continue the joint ticket if the plaintiff agreed to a fixed percentage of revenue that was below the revenue that the plaintiff had historically received under the joint ticket. *Id.* Significantly, after the plaintiff refused the defendant's offer and the joint ticket was discontinued, the defendant also refused to sell the plaintiff any lift tickets to the defendant's ski resorts, even though the plaintiff offered to pay the defendant retail price for the tickets. *Id.* at 593.

The United States Supreme Court found that the defendant in *Aspen Skiing* violated an antitrust duty to deal with its competitor. The United States Supreme Court explained the general rule that, "[i]n the absence of any purpose to create or maintain a monopoly, the [Sherman] [A]ct does not restrict the long recognized right of a" business to "exercise [its] own independent discretion as to the parties with whom [it] will deal." *Id.* at 602. However, in *Aspen Skiing*, the United States Supreme Court found that there was sufficient evidence to show that the defendant had refused to deal with the plaintiff only because of the defendant's anticompetitive intent to maintain its monopoly. Specifically, as the United States Supreme Court later explained in *Trinko*, the *Aspen Skiing* Court "found significance in the defendant's decision to cease participation in a cooperative venture." *Trinko*, 540 U.S. at 409. The *Aspen Skiing* defendant's "unilateral termination of a voluntary (*and thus presumably profitable*) course of dealing suggested a willingness to forsake short-term profits to achieve an anticompetitive end." *Id.* Moreover, "the defendant's unwillingness to renew the [joint] ticket *even if compensated at retail price* revealed a distinctly anticompetitive bent." *Id.* In those circumstances, the defendant's

refusal to deal with the plaintiff was a violation of the Sherman Act.

By contrast, the United States Supreme Court in *Trinko* held that Verizon did not have an antitrust duty to deal with its competitors. There, the Telecommunications Act of 1996 imposed on Verizon an obligation to share its telephone network with its rivals. *Id.* at 402. However, Verizon did not process its rivals' requests "in a timely manner, or not at all." *Id.* at 404–05. Verizon's rivals sued Verizon and alleged that Verizon's refusal to deal was part of an anticompetitive scheme to harm its rivals and maintain Verizon's monopoly. *Id.* However, the United States Supreme Court in *Trinko* held that the plaintiffs had failed to show that Verizon's conduct fell within *Aspen Skiing*'s exception to the general no-duty-to-deal rule. *Id.* at 408–09. Specifically, the *Trinko* Court stated that the plaintiff's complaint "d[id] not allege that Verizon voluntarily engaged in a course of dealing with its rivals," or that Verizon would have ever have dealt with its rivals absent the Telecommunications Act's requirements. *Id.* at 409. Moreover, the *Trinko* Court found further significance in the fact that, unlike the lift tickets at issue in *Aspen Skiing*, the services that Verizon was refusing to offer its competitors in *Trinko* were services that were "not otherwise marketed or available to the public." *Id.* at 410. In sum, the *Trinko* Court "conclude[d] that Verizon's alleged insufficient assistance to the provision of service to rivals is not a recognized antitrust claim under this Court's existing refusal-to-deal precedents." *Id.*

In *MetroNet Services Corp. v. Qwest Corp.*, 383 F.3d 1124, 1131 (9th Cir. 2004), the Ninth Circuit analyzed *Trinko* and *Aspen Skiing* and concluded that the United States Supreme Court considered three facts "significant for creating antitrust liability" in *Aspen Skiing* that were not present in *Trinko*. First, the *Aspen Skiing* defendant's "unilateral termination of a voluntary and profitable course of dealing." *Id.* at 1132. Second, the *Aspen Skiing* defendant's refusal to deal even if compensated at retail price, which suggested that the defendant's conduct was anticompetitive. *Id.* at 1132. Third, the fact that the *Aspen Skiing* defendant refused to provide its competitor a product that was "already sold in a retail market to other customers." *Id.* at 1113. The Ninth Circuit explained that this third fact related to the United States Supreme Court's "concern about the administrability of a judicial remedy. *Id.* Because the product at issue was

sold at retail, the court could "simply order the defendant to deal with its competitors on the same terms that it already deals with others in the existing retail market." *Id.* at 1133. By contrast, in *Trinko*, Verizon's services were not available to the public, and thus if a duty to deal was recognized, the court would have to act as a "central planner" and establish the terms of dealing. *Id.*

Thus, the Supreme Court's decisions in *Aspen Skiing* and *Trinko*, together with the Ninth Circuit's decision in *MetroNet*, instruct that a plaintiff alleges an antitrust duty to deal where the plaintiff alleges "[a] decision to alter a [voluntary] course of dealing together with evidence of anticompetitive malice," and where the recognition of an antitrust duty to deal will not present significant judicial administrability concerns. *SmithKline Beecham Corp. v. Abbott Labs.*, 2014 WL 6664226, at *4 (N.D. Cal. Nov. 24, 2014); *Safeway Inc. v. Abbott Labs.*, 2010 WL 147988, at *6 (N.D. Cal. Jan. 12, 2010) ("Taken together, *Aspen Skiing* and [*Trinko*] demonstrate that liability under § 2 can arise when a defendant voluntarily alters a course of dealing and 'anticompetitive malice' motivates the defendant's conduct."). Accordingly, the Court thus turns to consider whether FTC has adequately alleged that Qualcomm has a duty to deal within the meaning of *Aspen Skiing*, *Trinko*, and *MetroNet*.

b. FTC has Adequately Alleged that Qualcomm had an Antitrust Duty to License its FRAND-Encumbered SEPs to its Competitors

FTC contends that Qualcomm's refusal to license its competitors is a violation of an antitrust duty to deal because Qualcomm voluntarily agreed to license its SEPs in accordance with FRAND, and Qualcomm's later refusal to license its competitors is an alteration of that voluntary course of dealing. Opp. at 17–19. According to FTC, Qualcomm's decision to not license its competitors is motivated by anticompetitive malice because Qualcomm's refusal to license its SEPs to competing chips manufacturers is a necessary step in Qualcomm's "no license-no chips" policy, which allows Qualcomm to maintain its modem chips monopoly, as discussed above. *See id.*; Compl. ¶¶ 107–15. Based on the below analysis of the Ninth Circuit's three *MetroNet* facts, the Court agrees with FTC that, accepting FTC's allegations as true, FTC has adequately alleged

that Qualcomm has a duty to license its SEPs to its modem chips competitors.

i. Voluntary and Profitable Course of Dealing

First, the Court considers whether FTC has alleged that Qualcomm altered a "voluntary and profitable course of dealing." *MetroNet Servs. Corp.*, 383 F.3d at 1132. Significantly, FTC alleges that Qualcomm voluntarily "participated in cellular standard setting processes" through cellular SSOs such as ETSI, TIA, and ATIS. Compl. ¶ 54. These SSOs "require each party that participates in the standards-development process to commit to license its SEPs . . . on FRAND terms." *Id.* ¶ 50. According to FTC, "Qualcomm's FRAND commitments require [Qualcomm] to license its competitors to make and sell [modem chips] using Qualcomm's SEPs." *Id.* ¶ 108. Moreover, FTC alleges, Qualcomm *recognizes* that its FRAND commitments require it to license its modem chips rivals. *Id.* ¶ 109. FTC alleges that, despite voluntarily participating in the standard setting process, and despite voluntarily "commit[ing] to ETSI, TIA, ATIS, and other SSOs that it will license its cellular SEPs covering 2G, 3G, and 4G technologies on FRAND terms"—including to its modem chips competitors—Qualcomm has violated its FRAND commitments by refusing to license its modem chips competitors. *Id.* ¶¶ 57–58, 108. Indeed, FTC alleges, Qualcomm's rivals "have sought SEP licenses from Qualcomm," but Qualcomm has refused. *Id.* ¶ 112. Thus, FTC has alleged that Qualcomm engaged in a voluntary course of dealing with its rivals by participating in the standard setting process and committing to SSOs that it would license its SEPs to its modem chips competitors, but that Qualcomm altered this voluntary course of dealing by refusing to license its modem chips rivals once its patents were incorporated into cellular communications standards. *See id.* ¶¶ 107–12.

In addition to alleging that Qualcomm altered a voluntary course of dealing with its rivals, FTC also alleges that Qualcomm's voluntary FRAND commitments were "profitable" for Qualcomm. *See MetroNet Servs. Corp.*, 383 F.3d at 1132. Indeed, as FTC alleges, FRAND commitments are *intended* to ensure that the patent holder receives fair compensation for its intellectual property, while also ensuring that the patent holder does not "exercise any market power resulting from its patents' incorporation into that standard." Compl. ¶ 50. FTC alleges

that Qualcomm could "obtain fair compensation for its intellectual property" by complying with its FRAND obligations. *Id.* ¶ 112.

Nonetheless, Qualcomm argues that its conduct is distinguishable from *Aspen Skiing* because FTC does not allege that Qualcomm ever *actually* licensed its rivals in the past. Reply at 11. However, Qualcomm's *voluntary* participation in the standards setting process, and Qualcomm's *voluntary* commitment to license its SEPs on FRAND terms pursuant to the standards setting process, are the type of voluntary actions that can support an antitrust duty to deal. Significantly, the Third Circuit recognized this in *Broadcom v. Qualcomm, Inc.*, 501 F.3d 297, 304 (3d Cir. 2007). There, Broadcom "alleged that Qualcomm ignored its FRAND commitments to [SSOs] by demanding discriminatorily higher (i.e., non-FRAND) royalties from competitors and customers using chipsets not manufactured by Qualcomm." *Id.* According to Broadcom, Qualcomm's conduct was part of Qualcomm's effort to obtain a monopoly in the UMTS chip market. *Id.*

The Third Circuit in *Broadcom* stated that, assuming that Broadcom had alleged a refusal-to-deal claim in its Complaint, the Third Circuit would have found that Broadcom adequately stated a refusal-to-deal claim. *Id.* at 316. Specifically, the Third Circuit explained that Broadcom's Complaint alleged that Qualcomm had "actively marketed its [patents] for inclusion in an industry-wide standard," and that Qualcomm had "voluntarily agreed to license that technology on FRAND terms." *Id.* at 316. According to the Third Circuit, Qualcomm's voluntary participation in the standard setting process, and Qualcomm's voluntary commitment to FRAND, constituted a voluntary course of conduct that distinguished Qualcomm's conduct from Verizon's conduct *Trinko*, where the complaint "did not allege that [Verizon] engaged in a voluntary course of dealing with its rivals, or would have done so absent statutory compulsion." *Id.*

Here, FTC alleges, just as the Complaint alleged in *Broadcom*, that Qualcomm actively marketed its patents for inclusion into cellular communications standards, and that Qualcomm "voluntarily agreed to license" its SEPs on FRAND terms. *Id.* at 316; *see* Compl. ¶¶107–15. Accordingly, as the Third Circuit found, FTC's allegations that Qualcomm voluntarily participated

in the standards setting process and voluntarily committed to license its SEPs to its modem chips competitors are sufficient to allege that Qualcomm altered a voluntary and profitable course of dealing. *Id.*; *see* Compl. ¶¶ 107–15. Thus, the first *MetroNet* fact supports finding an antitrust duty to deal.

ii. Anticompetitive Malice

Second, FTC has alleged sufficient facts to show that Qualcomm's refusal to deal with its rivals, in violation of its FRAND commitment, was motivated by "anticompetitive malice." *SmithKline Beecham Corp.*, 2014 WL 6664226, at *4. As set forth above, FTC alleges that, like the defendant in *Aspen Skiing*, Qualcomm has not licensed its SEPs to its modem chips rivals, even though Qualcomm "could obtain fair compensation for its intellectual property" by licensing its SEPs in accordance with FRAND. Compl. ¶¶ 50, 143. FTC alleges that Qualcomm refuses to license its rivals, and instead licenses only OEMs, because this practice, in part, enables Qualcomm to enact its "no license-no chips" policy and harm its competitors' sales. *Id.* ¶ 114 ("Qualcomm's ability to tax its competitors' sales via patent license terms with OEMs would be limited if [Qualcomm] licensed cellular SEPs to its competitors."). "Qualcomm's competitors, unlike [Qualcomm's] OEM customers, do not depend on Qualcomm for [modem chips] supply." *Id.* "As a result, Qualcomm could not use a threatened disruption of [modem chips] supply to skew SEP-licensing negotiations with its competitors, and the royalties that would emerge from those negotiations would reflect the royalties that a court would deem reasonable." *Id.*

Moreover, if Qualcomm licensed its SEPs to its competitors, those competitors could "offer OEMs [modem chips] that convey the rights to Qualcomm's cellular SEPs," and Qualcomm could not be able to collect a royalty on handsets that contain its competitors' components. *Id.* ¶ 113; *see also id.* ¶¶ 64–68. Indeed, FTC alleges that Qualcomm recognizes that by licensing its SEPs only to OEMs, and not its modem chips competitors, Qualcomm is able to use its modem chips monopoly to "pursue licensing on a non-FRAND basis for SEPs." *Id.* ¶ 96–100. As discussed in detail above, Qualcomm's ability to collect above-FRAND royalties not only on the sales of its own modem chips, but also on the sale of its *competitors*' modem chips, allows

Qualcomm to impose a surcharge on its competitors' modem chips sales which "reduces demand for competitors' [modem chips], and reduces the ability and incentive of competitors to invest and innovate." *Id.* ¶87.

In sum, FTC alleges, Qualcomm's refusal to license its SEPs to its modem chips competitors is an essential component in Qualcomm's larger "no license-no chips" anticompetitive policy. *Id.* ¶ 114–15. FTC's allegations are sufficient, at this stage of the proceedings, to allege that Qualcomm's refusal to deal is motivated by "anticompetitive malice." *SmithKline Beecham Corp.*, 2014 WL 6664226, at *4. Thus, the second *MetroNet* fact supports finding an antitrust duty to deal.

iii. Judicial Administrability and Other Factors

Third, the "concern[s] about the administrability of a judicial remedy" that were present in *Trinko* are not present here. *MetroNet*, 383 F.3d at 1133 (citing *Trinko*, 549 U.S. at 409). As the Ninth Circuit in *MetroNet* explained, the *Trinko* Court found it significant that *Aspen Skiing* involved the defendant's refusal to provide a competitor "products that were already sold in a retail market to other customers." *Id.* In *Trinko*, by contrast, Verizon's "services allegedly withheld [were] not otherwise marketed or available to the public." *Trinko*, 540 U.S. at 410. Accordingly, the United States Supreme Court in *Trinko* was concerned that imposing on Verizon an antitrust duty to deal would require "antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing-a role for which they are ill suited." *Id.* at 408. Here, by contrast, the relevant "terms of dealing" for Qualcomm are Qualcomm's FRAND commitments. *Id.*; *see* Compl. ¶ 108. FTC's Complaint contains numerous allegations regarding how FRAND rates are determined, and that courts play an important role in determining reasonable FRAND royalty rates. Compl. ¶¶ 69–83 (describing lawsuits wherein the court determined a FRAND royalty rate). Accordingly, recognizing a duty to deal in this case would not require courts to play a larger role in setting the terms of dealing than the role that courts *already* play in determining appropriate royalties in patent cases. *Id.* Thus, the third *MetroNet* fact supports finding an antitrust duty to deal.

Finally, the Court notes that an additional concern expressed by the United States Supreme Court in *Trinko* is not present here. The United States Supreme Court in *Trinko* recognized that Verizon's conduct was already subject to an "extensive regulatory framework that created oversight function and remedies that the antitrust laws were unsuited to augment." *Broadcom*, 501 F.3d at 316–17 (citing *Trinko*, 540 U.S. at 410–15). By contrast, as the Third Circuit recognized in *Broadcom*, "[n]o such regulatory framework exists" with regards to FRAND commitments and SSOs, which are private organizations. *Id.* Thus, for this additional reason, FTC has adequately alleged that Qualcomm has a duty to license its SEPs to its modem chips competitors, and that Qualcomm's refusal to license its SEPs to its modem chips competitors is anticompetitive.

c. Summary

In sum, applying the three *MetroNet* facts and considering the Supreme Court's decisions in *Aspen Skiing* and *Trinko*, the Court finds that FTC has adequately alleged that, under the circumstances presented here, Qualcomm violated a duty to deal in refusing to license its FRAND-encumbered SEPs to its modem chips competitors. Thus, FTC has adequately alleged that Qualcomm's refusal to license its SEPs to its modem chips competitors is independent anticompetitive conduct that violates § 2 of the Sherman Act, and thus violates § 5 of the FTCA. The Court considers whether Qualcomm's exclusive dealing arrangements with Apple constitute independent anticompetitive conduct in violation of the antitrust laws.

D. Qualcomm's Exclusive Dealing Arrangements with Apple

Finally, FTC alleges that Qualcomm's exclusive dealing arrangements with Apple foreclosed competition in the market for premium LTE chips.[7] "Exclusive dealing is a theory under both § 1 and § 2 of the Sherman Act." *Feitelson v. Google Inc.*, 80 F. Supp. 3d 1019, 1029–30 (N.D. Cal. Feb. 20, 2015). An exclusive dealing arrangement "is an 'agreement between a vendor and a buyer that prevents the buyer from purchasing a given good from any other vendor,'

[7] The Complaint does not allege, and FTC does not argue, that these deals have foreclosed competition in the market for CDMA chips. *See* Compl.¶ 130.

and forecloses competition." *Aerotec Int'l v. Honeywell Int'l, Inc.*, 836 F.3d 1171, 1180 (9th Cir. 2016) (quoting *Allied Orthopedic Appliances Inc.*, 592 F.3d at 996 & n.1). "In certain limited situations, discounts and rebates conditioned on a promise of exclusivity or on purchase of a specified quantity or market share of the seller's goods or services may be understood as 'de facto' exclusive dealing contracts because they coerce buyers into purchasing a substantial amount of their needs from the seller." *Id.* at 1182; *see also Pro Search Plus, LLC v. VFM Leonardo, Inc.*, 2013 WL 6229141, at *5 (C.D. Cal. Dec. 2, 2013) ("[D]e facto exclusive dealing claims are cognizable under the antitrust laws." (quoting *ZF Meritor*, 695 F.3d at 270)).

"[W]hether bringing claims under § 1 or § 2, a plaintiff [] must plead facts that support a plausible inference that the exclusive dealing arrangement forecloses a substantial share of the relevant market." *Eastman v. Quest Diagnostics Inc.*, 2015 WL 7566805, at *11 (N.D. Cal. Nov. 25, 2015). However, some courts have recognized that the "definition of 'substantial share' varies" under § 1 and § 2. *Id.* Exclusive dealing "violates §1 only if its effect is to 'foreclose competition in a substantial share of the line of commerce effected,'" which has typically "been quantified as foreclosure of 40% to 50% of the relevant market." *Feitelson*, 80 F. Supp. 3d at 1030. By contrast, "a monopolist's use of exclusive contracts, in certain circumstances, may give rise to a § 2 violation even though the contracts foreclose less than the roughly 40% or 50% share usually required in order to establish a § 1 violation." *Microsoft*, 253 F.3d at 70.

Qualcomm asserts that FTC has failed to allege that its exclusive dealing arrangements with Apple violate the Sherman Act because FTC has failed to allege that Qualcomm's exclusive dealing arrangements with Apple have foreclosed a substantial share of the market for premium LTE modem chips, either under § 2 or § 1. Mot. at 18–21. Specifically, Qualcomm argues that (1) FTC fails to allege a specific percentage of the market that was foreclosed; (2) FTC fails to "identify any competitor that was purportedly excluded from the alleged market"; (3) FTC "acknowledges that Intel began supplying premium LTE modem chips to Apple" while the agreements were in effect, which refutes FTC's allegations that sales to Apple were foreclosed. *See id.* However, for the reasons discussed below, the Court agrees with FTC that the Complaint

alleges sufficient facts to withstand a motion to dismiss.

First, Qualcomm argues that FTC has failed to allege substantial foreclosure because FTC has failed to allege a specific percentage of the market that is foreclosed, and because FTC fails to allege what percentage of the OEM market Apple occupied. Mot. at 19. However, courts have recognized that, at the motion to dismiss stage, a plaintiff is not necessarily required to allege a specific percentage of foreclosure. *See E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc.*, 637 F.3d 435, 452 n. 12 (4th Cir. 2011) ("While Kolon did not allege a specific percentage of market foreclosure in its Counterclaim, it would be problematic to reject its Counterclaim, with its extensive factual allegations, solely on the basis at the pre-discovery, motion-to-dismiss stage."). Here, although FTC has not alleged a specific percentage of the market, FTC has alleged sufficient facts that plausibly suggest that Qualcomm's exclusive dealing arrangements with Apple "significantly limited" "the opportunities for other [chip manufacturers] to enter into or remain in [the] market" for premium LTE chips, as required to state an exclusive dealing claim. *Microsoft*, 253 F.3d at 69 (internal quotation marks omitted). Specifically, FTC alleges that Apple manufactures and sells "large volumes" of premium-tier handsets, including the iPhone, and that Apple is a "particularly important" OEM for modem chips suppliers. *See* Compl. ¶ 129. FTC further explains that Apple also provides modem chips manufacturers with significant learning opportunities and reputational benefits. *See id.* (describing the reputational "halo effect" of working with Apple).

Moreover, FTC alleges that "Qualcomm recognized that any competitor that won business at Apple would become stronger and better positioned to win future designs at Apple and other OEMs," and that Qualcomm intended its agreements with Apple to prevent its competitors from working with Apple and achieving these benefits. *Id.* ¶ 127. Indeed, the Complaint states that Qualcomm's exclusive dealing arrangements with Apple did, in fact, "significantly impede[] the development of other [modem chip] suppliers into effective competitors to Qualcomm," and that Qualcomm's agreements with Apple "foreclosed a substantial share of the market for premium LTE" modem chips. *Id.* ¶ 130. These allegations are sufficient, at the motion to dismiss stage, to

allege substantial foreclosure in the market for premium LTE modem chips and thus are sufficient to state a claim under either § 1 or § 2 of the Sherman Act. *See Blue Sky Color of Imagination, LLC v. MeadWestvaco Corp.*, 2010 WL 4366849, at *4 (C.D. Cal. Sept. 23, 2010) (finding allegations sufficient where the complaint alleged that "Mead entered into an exclusive dealing contract with the intent and effect of excluding all rivals from certain office superstores"); *see also ProSearch Plus, LLC*, 2013 WL 6229141, at *7 (finding it "premature," on a motion to dismiss, "to determine whether the agreements do in fact leave open alternative channels of distribution" such that they foreclosed a substantial share of the market).

Second, Qualcomm argues that FTC has failed to state a claim because FTC "does not identify any competitor that was purportedly excluded from the alleged market." Mot. at 20. However, the Complaint alleges that "Apple had at all relevant times an interest in developing and working with additional suppliers of [chips]," but that Qualcomm's agreements "prevented Apple from using alternative [chips] suppliers during the effective exclusivity period under these agreements." *Id.* ¶ 125. These allegations are sufficient to plausibly allege that competitors were excluded from the alleged market by Qualcomm's agreements with Apple. Although FTC has not identified by name any *specific* competitor that was excluded by Qualcomm's agreements with Apple, the case law does not suggest that this degree of specificity is required at the motion to dismiss stage. Indeed, courts have denied motions to dismiss exclusive dealing claims even where the complaint did not allege all of *the parties* to the exclusive deal, so long as the complaint "explain[ed] how [the defendant's] alleged scheme operate[d]" and provided facts beyond "mere legal conclusions." *See, e.g.*, *Tele Atlas N.V. v. Navteq Corp.*, 397 F. Supp. 2d 1184, 1190 (N.D. Cal. Nov. 2, 2005) (collecting cases). FTC's complaint provides sufficient factual allegations, beyond "mere legal conclusions," to plausibly allege that Qualcomm's dealing arrangements with Apple excluded competitors. *Id.*; *see* Compl. ¶¶ 124–30.

Third, Qualcomm argues that the Complaint alleges that Intel *did* begin to supply Apple with chips, and that this negates the Complaint's allegations that Qualcomm's agreements with Apple foreclosed all competitor sales to Apple. Mot. at 20. However, the Complaint alleges that

Qualcomm's agreements with Apple resulted in de facto exclusion "from October 2011 until September 2016." Compl. ¶ 126. The Complaint alleges only that Intel "began to supply a portion of Apple's baseband processor requirements for the iPhone 7,"[8] *see* Compl. ¶ 45, which Qualcomm acknowledges occurred in *October* 2016. *See* Mot. at 20–21. Thus, for purposes of the instant motion to dismiss, Intel's supply of chips to Apple does not negate FTC's allegations that Qualcomm's arrangements with Apple foreclosed competition from October 2011 until September 2016.

In sum, FTC has adequately alleged that Qualcomm entered into de facto exclusive dealing arrangements with Apple from October 2011 until September 2016, and that these de facto exclusive dealing arrangements foreclosed a substantial share of the market for premium LTE modem chips. Accordingly, FTC has adequately alleged that Qualcomm's exclusive dealing arrangements with Apple violated the Sherman Act, and thus violated § 5 of the FTCA.

IV. CONCLUSION

For the foregoing reasons, Qualcomm's motion to dismiss is DENIED.

IT IS SO ORDERED.

Dated: June 26, 2017

Lucy H. Koh

LUCY H. KOH
United States District Judge

[8] As Intel explains in its amicus brief, Qualcomm ignores "*why* Intel finally was able to supply Apple after all of these years." ECF No. 92-1 ("Intel Br."), at 21. According to Intel, the most plausible explanation is that Qualcomm was deterred from its exclusive dealing practices because Qualcomm has faced or is facing investigations, and in some instances fines, from the Korea Fair Trade Commission, Japan Fair Trade Commission, China's National Development and Reform Commission, and the European Commission, in addition to the Taiwan Fair Trade Commission. *See* Intel Br. at 5, 21.