

1 SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
 2 A Limited Liability Partnership
 3 Including Professional Corporations
 4 STEPHEN S. KORNICZKY, Cal. Bar No. 135532
 5 MARTIN R. BADER, Cal. Bar No. 222865
 6 MATTHEW W. HOLDER, Cal. Bar No. 217619
 7 12275 El Camino Real, Suite 200
 8 San Diego, California 92130
 9 Telephone: 858.720.8900
 Facsimile: 858.509.3691
 E mail skorniczky@sheppardmullin.com
 mbader@sheppardmullin.com
 mholder@sheppardmullin.com

10 MICHAEL W. SCARBOROUGH, Cal. Bar No. 203524
 11 MONA SOLOUKI, Cal. Bar No. 215145
 12 Four Embarcadero Center, 17th Floor
 13 San Francisco, California 94111
 Telephone: 415.434.9100
 Facsimile: 415.434.3947
 E mail mscarborough@sheppardmullin.com
 msolouki@sheppardmullin.com

16 Attorneys for Plaintiff
 17 Continental Automotive Systems, Inc.

18
 19 UNITED STATES DISTRICT COURT
 20 NORTHERN DISTRICT OF CALIFORNIA

21
 22 CONTINENTAL AUTOMOTIVE
 23 SYSTEMS, INC., a Delaware
 24 corporation,

25 Plaintiff,

26 v.

27 AVANCI, LLC, a Delaware
 28 corporation, AVANCI PLATFORM

Case No. 19-cv-2520-LHK

**FIRST AMENDED COMPLAINT
 FOR BREACH OF FRAND
 COMMITMENTS AND
 VIOLATIONS OF ANTITRUST
 AND UNFAIR COMPETITION
 LAWS:**

(1) Breach of Contract;

1 INTERNATIONAL LIMITED, an Irish
2 company, NOKIA CORPORATION, a
3 Finnish corporation, NOKIA OF
4 AMERICA CORPORATION, a
5 Delaware corporation, NOKIA
6 SOLUTIONS AND NETWORKS US
7 LLC, a Delaware corporation, NOKIA
8 SOLUTIONS AND NETWORKS OY,
9 a Finnish corporation, NOKIA
10 TECHNOLOGIES OY, a Finnish
11 corporation, CONVERSANT
12 WIRELESS LICENSING SARL, a
13 Luxembourg corporation, OPTIS UP
14 HOLDINGS LLC, a Delaware
15 corporation, OPTIS CELLULAR
16 TECHNOLOGY, LLC, a Delaware
17 corporation, OPTIS WIRELESS
18 TECHNOLOGY, LLC, a Delaware
19 corporation, SHARP CORPORATION,
20 a Japanese corporation,
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Defendants.

- (2) Promissory Estoppel;
- (3) Declaratory Judgment;
- (4) Violation of Section 1 of the Sherman Act—Concerted Action Unreasonably Restraining Trade
- (5) Violation of Section 2 of the Sherman Act—Unlawful Monopolization;
- (6) Violation of Section 2 of the Sherman Act—Conspiracy to Monopolize;
- (7) Violations of the California Unfair Competition Law, Business and Professions Code Section 17200 et seq.

1 Plaintiff Continental Automotive Systems, Inc. (“Continental” or “Plaintiff”)
2 alleges the following facts and claims against Defendants Avanci, LLC, Avanci
3 Platform International Limited (collectively, “Avanci”), Nokia Corporation (“Nokia
4 Corp.”), Nokia of America Corporation (“Nokia America”), Nokia Solutions and
5 Networks US LLC (“Nokia Solutions”), Nokia Solutions and Networks Oy (“Nokia
6 Solutions Oy”), Nokia Technologies Oy (“Nokia Technologies Oy”) (Nokia Corp.,
7 Nokia America, Nokia Solutions, Nokia Solutions Oy, and Nokia Technologies Oy
8 collectively referred to herein as “Nokia”), Conversant Wireless Licensing SARL
9 (“Conversant SARL”), Optis UP Holdings, LLC (“Optis UP”), Optis Cellular
10 Technology, LLC (“Optis Cellular”), Optis Wireless Technology, LLC (“Optis
11 Wireless”) (Optis UP, Optis Cellular, and Optis Wireless collectively referred to
12 herein as “PanOptis”), Sharp Corporation (“Sharp”) (collectively, “Defendants”)
13 (Nokia, Conversant, PanOptis, and Sharp collectively referred to herein as
14 “Defendant Licensors”).

15 **INTRODUCTION**

16 1. Continental, a leading provider of cutting-edge automotive
17 components, including gateway products and telematics control units (“TCUs”),
18 brings this lawsuit because of Defendants’ concerted refusal to license their alleged
19 standard essential patents (“SEPs”) relevant to the 2G, 3G, and 4G cellular standards
20 to Continental and its suppliers on fair, reasonable, and non-discriminatory
21 (“FRAND”) terms and conditions.¹ Continental is a willing licensee, and seeks to
22 pay a FRAND royalty rate for a license to the SEPs owned or controlled by
23 Defendants. Accordingly, Continental seeks a declaration of its rights and
24 Defendants’ breaches of contract and other violations of law, as well as the
25 determination and imposition of the FRAND terms and conditions for a license to
26 the SEPs owned or controlled by Defendants.

27 _____
28 ¹ For purposes of this Complaint, FRAND will also mean and refer to reasonable
and non-discriminatory (“RAND”) terms and conditions.

1 2. In today’s society, many products in addition to mobile phones,
2 including cars, also include cellular connectivity. For example, cars use cellular
3 connectivity for emergency communications, among others. A car can provide such
4 connectivity primarily through a telecommunications chipset, known as a baseband
5 processor, which is the core electronic component that allows it to transmit and
6 receive information to and from a cellular communications network. The baseband
7 processor is typically incorporated within a network access device (“NAD”), which
8 is itself often a sub-system of the TCU. The TCU includes additional functionality
9 and components beyond cellular communication, including, by way of example,
10 GPS, interface software, and control functions. The car into which the TCU (and
11 thus the NAD and baseband processor) is incorporated obviously includes many
12 functionalities having nothing to do with cellular connectivity, which is at best
13 tangential to the main functionality of a car.

14 3. Enabling cellular connectivity requires the use of widely adopted
15 cellular standards, such as the second generation (“2G”), third generation (“3G”),
16 and/or fourth generation (“4G”) cellular standards adopted by various standard-
17 setting organizations (“SSOs”), such as ETSI, ATIS, TTA, ARIB, CCSA and others
18 (addressed in more detail beginning at paragraph 64). Continental is a Tier 1
19 supplier of TCUs to various automotive original equipment manufacturers
20 (“OEMs”), *i.e.*, vehicle manufacturers. Continental sources its NADs primarily
21 from Tier 2 suppliers, who in turn source the necessary baseband processor chipsets
22 that enable cellular connectivity from companies that manufacture such chipsets
23 (*e.g.*, Qualcomm, Intel, or MediaTek, sometimes referred to as Tier 3 suppliers).

24 4. Defendant Licensors claim to own patents that have been declared
25 essential to the cellular standards that are implemented in the components and/or
26 subsystems supplied by Tier 1, Tier 2, and Tier 3 suppliers, including
27 Continental. Avanci is a self-proclaimed “licensing platform” purporting to offer
28 “one-stop” access to essential patents necessary for cellular connectivity. On

1 information and belief, Avanci claims to license the majority of the total SEPs
2 necessary for implementing the 2G, 3G, and 4G cellular standards, although Avanci
3 does not disclose the actual percentage. Avanci purportedly does not own any
4 patents directly, but rather acts on behalf of Defendant Licensors and other owners
5 of SEPs (collectively “Avanci Members”) as their licensing agent for the alleged
6 SEPs, and controls the licensing of those SEPs.

7 5. On information and belief, all of the SEPs at issue are the subject of
8 express and voluntary promises made either directly by Defendant Licensors, or
9 their predecessors-in-interest, to the relevant SSOs pursuant to those SSOs’
10 Intellectual Property Rights (“IPR”) Policies. Such IPR Policies all require
11 Defendants to license the alleged SEPs to any user of the standard that requests a
12 license, and do so on FRAND terms and conditions. The SSOs relied on such
13 FRAND commitments when they purportedly incorporated Defendant Licensors’
14 proprietary technology into their standards.

15 6. The relevant SSOs require FRAND commitments in recognition of the
16 dangers inherent in collective standard-setting activities which eliminate competitive
17 technological alternatives that otherwise would have existed in the market. Once
18 standardized, a technology is “locked in” and must be practiced by all who wish to
19 produce standard-compliant products. Such lock-in gives SEP owners the market
20 power to exclude companies from practicing the standard, and to raise the cost of
21 practicing the standards by charging supra-competitive royalties in excess of the *ex*
22 *ante* value of such technology when it still competed with alternatives. This
23 phenomenon is often referred to as “hold-up.” Such market power does not derive
24 from the original patenting of the SEPs at issue, but results directly from collective
25 action. In order to ameliorate the risks posed by the existence of this market power,
26 and as a trade-off for having its proprietary technology included in the standards,
27 which in turn enables the SEP owner to license a much greater volume of products
28 than would be the case if the technology was not used in the standards, the SEP

1 owner is required to make the FRAND licensing commitment.

2 7. Continental, as a supplier of TCUs implementing various cellular
3 standards, relies on such FRAND licensing promises and is a third-party beneficiary
4 of the SEP holders' FRAND promises to the relevant SSOs. However, with respect
5 to the alleged SEPs owned or controlled by Defendants, Continental's repeated
6 attempts to obtain a license have been unsuccessful.

7 8. Upon information and belief, Defendants have collusively agreed to
8 only offer licenses to the automotive industry at the OEM level in an attempt to
9 obtain elevated royalties that far exceed any measure of FRAND. Indeed,
10 Continental has sought a license from each of the Defendants, including Avanci, the
11 Defendants' purported collective licensing "agent," but has been met with either
12 refusals to offer a direct license, or no response whatsoever. For example, when
13 Continental sought a license from Avanci, Avanci informed Continental that, as part
14 of Avanci's collective agreement with its members, Avanci is only authorized to
15 license at the OEM level. Moreover, Avanci would only seek the additional
16 authorization required to license Continental if Continental first agreed to be bound
17 by Avanci's inflated and non-FRAND royalty rates offered to the OEMs—a
18 proposal Avanci knew Continental could not agree to.

19 9. On information and belief, Avanci demands as much as \$15/vehicle for
20 a license to the Avanci Members' patents covering 4G/3G/2G and E-Call
21 capabilities. This amount exceeds any measure of FRAND for that combination of
22 patents. There is no economic, technical, or other valid justification for royalty rates
23 this high, and such rates are not consistent with the incremental value of
24 Defendants' SEPs, if any, to the relevant products in the supply chain. Indeed, such
25 royalties would not be sustainable if charged to the Tier 1, Tier 2, or Tier 3 levels of
26 the supply chain. For example, a typical baseband processor with 4G/3G/2G
27 capabilities costs around \$20 or less, a typical NAD costs under \$40, and a typical
28 TCU with such functionalities can cost under \$100, with prices continually dropping

1 and subject to downward pressure within the supply chain. If one assumes a TCU
2 priced at \$75, then a \$15 royalty even at the TCU level—two tiers above the
3 baseband processor chipset, which is the component that directly implements the
4 cellular standards at issue—would amount to a 20% effective royalty rate. Such a
5 royalty rate would exceed the profit margin on the TCU, let alone that of the NAD
6 or the baseband processor which most directly implements the standards here.
7 Moreover, such a royalty would not account for the cost of licensing the remaining
8 SEPs that are not part of the Avanci “platform” and must be separately licensed, and
9 would imply effective aggregate royalties of as much as 40% at the TCU level,
10 assuming Avanci actually licenses at least half of the relevant SEPs.

11 10. Because Defendants could not justify such exorbitant royalties to the
12 suppliers of components and subsystems in the supply chain, they colluded to
13 maintain their exorbitant royalty rates—and thus their monopoly—by refusing to
14 license Tier 1, Tier 2, or Tier 3 suppliers. Instead, they agreed to require their
15 licensing agent, Avanci, to offer to collectively license their SEPs only at the OEM
16 level—where the optics of their non-FRAND licensing model would appear
17 superficially less severe given the substantially higher price and margin of a car as
18 compared to that of a baseband processor, NAD, or TCU.

19 11. However, regardless of how Defendants attempt to spin their collusive
20 licensing model, Continental and other Tier 1 suppliers in the supply chain directly
21 bear the artificially elevated cost of Defendants’ non-FRAND royalties because the
22 OEMs typically demand indemnity of such licensing costs as a condition of
23 purchasing any TCUs from Tier 1 suppliers. Accordingly, royalties charged to
24 OEMs risk being passed through to Tier 1 suppliers like Continental. As alleged
25 herein, such indemnity costs are disproportionate to Tier 1 suppliers’ margins and
26 expose them, including Continental, to potentially ruinous liability. Defendants
27 should not be permitted to achieve indirectly what they could not do directly—*i.e.*,
28 demand supra-FRAND royalties from suppliers within the supply chain that would

1 effectively wipe out those suppliers' margins and ability to continue in business.

2 12. Continental, for its part, may not be able to pass on the indemnity costs
3 that would be associated with Defendants' collusive and elevated royalties. To the
4 extent Continental must absorb such costs, it must forego investment and innovation
5 in TCUs and related products to the detriment of consumers. Such indemnity costs
6 will substantially burden not only Continental, but also the entire Tier 1 supplier
7 industry in the form of lower investment and innovation, as other Tier 1 suppliers
8 face the same market realities as Continental. Even if Continental theoretically
9 could pass on some of those royalty costs, it can be expected that at least a portion
10 of such costs will be passed on to American consumers in the form of higher prices
11 or lower functionality. Either way, consumers will bear the ultimate costs as a result
12 of Defendants' refusal to license suppliers in the automotive supply chain, and also
13 their refusal to offer FRAND terms and conditions.

14 13. None of the IPR policies established by the relevant SSOs in any way
15 restrict who is eligible and entitled to receive a FRAND license from the owners of
16 FRAND-encumbered SEPs. Indeed, in such a consensus-oriented context involving
17 many competitors at different levels, it is doubtful that an express policy to
18 effectively exclude entire categories of implementers from access to the standards
19 would have survived the barest of antitrust scrutiny, or even gained the necessary
20 consensus among all relevant stakeholders.

21 14. To the contrary, the IPR policies of all relevant SSOs expressly prohibit
22 owners of FRAND-encumbered SEPs from discriminating among users of the
23 standards. For example, the ETSI IPR Policy requires SEP owners to commit to
24 provide "irrevocable licenses on fair, reasonable and nondiscriminatory ('FRAND')
25 terms and conditions." The TIA policy requires any SEP holder that wishes to
26 monetize its essential patents to commit to license SEPs "to all applicants under
27 terms and conditions that are reasonable and non-discriminatory . . . to the extent
28 necessary for the practice of . . . the Standard." The ATIS policy requires SEP

1 holders to commit that a license “will be made available to applicants desiring to
2 utilize the license for the purpose of implementing the standard . . . under reasonable
3 terms and conditions that are demonstrably free of any unfair discrimination.”

4 Other relevant SSOs’ IPR policies are similar and consistent.

5 15. Thus, Defendants’ collusive agreement to discriminate against
6 suppliers, like Continental, by refusing to license the relevant 2G, 3G, and 4G SEPs
7 to Continental and other suppliers on FRAND terms and conditions not only
8 breaches Defendants’ FRAND commitments, but constitutes anticompetitive
9 conduct in violation of the antitrust laws resulting in reduced competition and
10 innovation in both the upstream technology licensing markets and the downstream
11 TCU market, and higher prices to ultimate consumers as further alleged herein. As
12 a result, Continental has brought this lawsuit in order to address the above breaches
13 of contract and other violations of law, and obtain a license to the SEPs owned or
14 controlled by Defendants on FRAND terms and conditions.

15 **THE PARTIES**

16 **A. Continental**

17 16. Plaintiff Continental Automotive Systems, Inc. (“Continental”) is a
18 corporation organized under the laws of the State of Delaware, with its principal
19 place of business at One Continental Drive, Auburn Hills, Michigan 48326.

20 17. Continental is an indirect subsidiary of Continental AG, a corporation
21 organized and existing under the laws of Germany. Continental AG was originally
22 founded in 1871 as a rubber manufacturer, focusing its business on automotive tires.
23 Since then, Continental AG has expanded into new automotive business areas,
24 becoming one of the leading suppliers to automotive OEMs worldwide. Today,
25 Continental AG’s business is organized into five divisions: the Interior Division,
26 the Chassis & Safety Division, the Powertrain Division (collectively forming the
27 Automotive Group), the Tire Division, and the ContiTech Division (collectively
28 forming the Rubber Group).

1 18. The Interior Division develops, *inter alia*, highly innovative telematics
2 devices, including TCUs that merge telecommunications, infotainment, and safety
3 features. The TCUs produced by Continental rely on telecommunications standards,
4 such as 2G, 3G, and/or 4G cellular standards, to transmit and receive data used by
5 these features. Indeed, Continental was an early innovator in the design and
6 production of TCUs. Continental and/or Continental AG also spend millions of
7 dollars in research and development in an effort to engineer solutions that are
8 separate from or in addition to the cellular connections made by connected vehicles.

9 19. In April 2017, a nearly 65,000 square foot research and development
10 center was opened in Silicon Valley, with activity that includes a focus on
11 connectivity and mobility services. Through this research and development center
12 in Silicon Valley, all areas of Continental cooperate in an interdisciplinary and
13 collaborative manner to engineer Continental's next innovative contributions to the
14 automotive market.

15 **B. Avanci**

16 20. Upon information and belief, defendant Avanci, LLC is a limited
17 liability corporation organized under the laws of the State of Delaware, with its
18 principal place of business at 1717 McKinney Avenue, Suite 1050, Dallas, Texas
19 75202.

20 21. Upon information and belief, defendant Avanci Platform International
21 Limited (collectively with Avanci, LLC, "Avanci") is a company organized and
22 existing under the laws of Ireland, having its principal place of business at Unit 40,
23 The Hyde Building, The Park, Carrickmines, Dublin 18, Ireland D18 PX40.

24 22. Upon information and belief, Avanci regularly conducts business in
25 California which supports its patent licensing business.

26 23. Upon information and belief, Avanci derives revenues primarily from
27 patent licensing and aggressively seeks to monetize the alleged SEPs for which it
28 acts as licensing agent by targeting automotive OEMs that sell automobiles

1 incorporating components that operate in compliance with these standards, both in
2 California and all around the world.

3 24. Upon information and belief, Avanci claims to have the right to license
4 a majority of the world's cellular SEPs spanning multiple jurisdictions and
5 telecommunications technologies.

6 25. Upon information and belief, Avanci has engaged in licensing and
7 related business negotiations within this judicial district, including with at least
8 defendant Conversant SARL (Conversant SARL's Chief Executive Officer, who
9 announced Conversant SARL's relationship with Avanci, is based in Conversant's
10 office within this judicial district), InterDigital, Inc. ("InterDigital") (InterDigital has
11 offices and high level officers in this judicial district), and defendant Nokia (Nokia
12 has multiple offices in this judicial district and high level licensing negotiation
13 personnel in this judicial district).

14 26. Upon information and belief, Avanci has entered into license
15 agreements with entities located within this judicial district that require continuing
16 obligations with this judicial district, and/or choice of law and forum selection
17 clauses in this judicial district. For example, at least Avanci Members BlackBerry,
18 Conversant SARL, and Nokia all have a substantial presence in this judicial district
19 and current or former principal places of business in this judicial district.

20 **C. Nokia**

21 27. Upon information and belief, defendant Nokia Corporation ("Nokia
22 Corp.") is a corporation organized and existing under the laws of Finland, having its
23 principal place of business at Karaportti 3, 02610 Espoo, Finland.

24 28. Upon information and belief, defendant Nokia of America Corporation
25 ("Nokia America") is a corporation organized under the laws of Delaware, having
26 its principal place of business at 600 Mountain Avenue, Murray Hill, New Jersey
27 07974. Upon information and belief, Nokia of America Corporation is a wholly
28 owned subsidiary of Nokia Corporation.

1 29. Upon information and belief, defendant Nokia Solutions and Networks
2 US LLC (“Nokia Solutions”) is a corporation organized under the laws of Delaware,
3 having its principal place of business at 6000 Connection Drive, Irving, Texas
4 75039. Upon information and belief, Nokia Solutions and Networks US LLC is a
5 wholly owned subsidiary of Nokia Corp.

6 30. Upon information and belief, defendant Nokia Solutions and Networks
7 Oy (“Nokia Solutions Oy”) is a corporation organized and existing under the laws of
8 Finland, having its principal place of business at Karaportti 3, 02610 Espoo,
9 Finland. Upon information and belief, Nokia Solutions Oy is a wholly owned
10 subsidiary of Nokia Corp.

11 31. Upon information and belief, defendant Nokia Technologies Oy is a
12 corporation organized and existing under the laws of Finland, having its principal
13 place of business at Karaportti 3, 02610 Espoo, Finland. Upon information and
14 belief, Nokia Technologies Oy is a wholly owned subsidiary of Nokia Corp.

15 32. Upon information and belief, Nokia America, Nokia Solutions, Nokia
16 Solutions Oy, and Nokia Technologies Oy are all wholly-owned direct or indirect
17 subsidiaries of Nokia Corp. Nokia Corp., Nokia America, Nokia Solutions, Nokia
18 Solutions Oy, and Nokia Technologies Oy (collectively “Nokia”) act as a common,
19 unified economic enterprise.

20 33. Upon information and belief, Nokia conducts business within the
21 United States as a whole, including having employees located at multiple offices
22 and campuses within this judicial district with locations including Mountain View,
23 San Jose, Sunnyvale, and Petaluma. Upon information and belief, Nokia supports
24 its patent licensing business through its operations within this judicial district, and
25 has sent licensing correspondence to Continental’s affiliate from its offices in this
26 judicial district.

27 34. Upon information and belief, Nokia joined the Avanci platform on or
28 about October 25, 2018.

1 **D. Conversant**

2 35. Upon information and belief, defendant Conversant Wireless Licensing
3 SARL (“Conversant SARL”) is a corporation organized and existing under the laws
4 of Luxembourg, having its principal place of business at 12, rue Jean Engling, L-
5 1466 Luxembourg, Luxembourg.

6 36. Upon information and believe, Conversant SARL conducts business
7 within the United States as a whole, which supports its patent licensing business.

8 37. Upon information and belief, Conversant SARL derives revenues
9 primarily from patent licensing and aggressively seeks to monetize its patents,
10 which includes patents declared essential to the 2G, 3G, and 4G standards—at least
11 through its agent Avanci.

12 38. Upon information and belief, Conversant SARL is a wholly-owned
13 direct or indirect subsidiary of Conversant Intellectual Property Management Inc.
14 (“Conversant IP Inc.”), a corporation organized under the laws of Canada, having its
15 principal place of business at 515 Legget Drive, Suite 704, Ottawa, Ontario, Canada
16 K2K 3G4.

17 39. Upon information and belief, Conversant Intellectual Property
18 Management Corporation (“Conversant IP Corp.”), is a corporation organized under
19 the laws of Texas, having its principal place of business at 5601 Granite Parkway
20 Suite 1300, Plano, TX 75024, and its principal business office in California at 2441
21 Park Blvd. Suite 104, Palo Alto, CA 94036. Conversant Wireless Licensing Ltd.
22 (“Conversant Wireless”), is a corporation organized under the laws of Texas, having
23 its principal place of business at 5601 Granite Parkway Suite 1300, Plano, TX
24 75024.

25 40. Upon information and belief, Conversant SARL, Conversant IP Corp.,
26 and Conversant Wireless are all wholly-owned direct or indirect subsidiaries of
27 Conversant IP Inc. Conversant IP Inc., Conversant SARL, Conversant IP Corp., and
28 Conversant Wireless (collectively “Conversant”) act as a common, unified

1 economic enterprise.

2 41. Upon information and belief, Conversant has offices and employees in
3 the United States, including California, and/or regularly conducts business in
4 California and in this district, including via its office at 2441 Park Blvd, Suite 104,
5 Palo Alto, CA 94036, as well as the presence of the Chief Executive Officer of
6 Conversant IP Inc., Boris Teksler, in this district. For example, Continental's
7 correspondence with Conversant relevant to this matter was directed to Conversant's
8 office in this judicial district.

9 42. According to publicly available information, Conversant's patents are
10 held by Conversant SARL and are managed by Conversant by and through business
11 activity in this judicial district.

12 43. Upon information and belief, Conversant SARL joined the Avanci
13 platform on or about October 10, 2018, by and through activities taking place in this
14 judicial district.

15 **E. PanOptis/Unwired Planet**

16 44. Upon information and belief, defendant Optis Wireless Technology,
17 LLC ("Optis Wireless") is a corporation organized and existing under the laws of
18 Delaware, having its principal place of business at 7160 Dallas Parkway, Suite 250,
19 Plano, TX 75024.

20 45. Upon information and belief, defendant Optis Cellular Technology,
21 LLC ("Optis Cellular") is a corporation organized and existing under the laws of
22 Delaware, having its principal place of business at 7160 Dallas Parkway, Suite 250,
23 Plano, TX 75024.

24 46. Upon information and belief, defendant Optis UP Holdings, LLC
25 ("Optis UP") is a corporation organized under the laws of Delaware, having its
26 principal place of business at 7160 Dallas Parkway, Suite 250, Plano, TX 75024.

27 47. Optis UP, Optis Cellular, and Optis Wireless are collectively referred to
28 herein as "PanOptis." Upon information and belief, PanOptis conducts business

1 within the United States as a whole, which supports its patent licensing business.

2 48. Upon information and belief, PanOptis derives revenues primarily from
3 patent licensing and aggressively seeks to monetize its patents, which includes
4 patents declared essential to the 2G, 3G, and 4G standards—at least through its
5 agent Avanci.

6 49. Upon information and belief, Optis Wireless, Optis Cellular, and Optis
7 UP are wholly-owned direct or indirect subsidiaries of PanOptis Patent
8 Management, LLC, a corporation organized and existing under the laws of
9 Delaware, having its principal place of business at 7160 Dallas Parkway, Suite 250,
10 Plano, TX 75024.

11 50. Upon information and belief, PanOptis Patent Management, LLC
12 obtained all patents formerly owned by Unwired Planet, Inc., which patents are now
13 owned by Optis UP, which also operates under the name “Unwired Planet.”

14 51. Upon information and belief, PanOptis joined the Avanci platform on
15 or about March 6, 2017.

16 **F. Sharp**

17 52. Upon information and belief, defendant Sharp Corporation (“Sharp”) is
18 a corporation organized and existing under the laws of Japan, having its principal
19 place of business at 1 Takumi-cho, Sakai-ku, Sakai-City, Osaka, 590-8522, Japan.
20 Upon information and belief, Sharp is also known as “Sharp Kabushiki Kaisha.”

21 53. Upon information and believe, Sharp conducts business within the
22 United States as a whole, which supports its patent licensing business. Upon
23 information and belief, Sharp derives revenues from patent licensing and
24 aggressively seeks to monetize its patents, which includes patents declared essential
25 to the 2G, 3G, and 4G standards—at least through its agent Avanci.

26 54. Upon information and belief, Sharp Electronics Corporation (“SEC”) is
27 a wholly-owned direct or indirect subsidiary of Sharp. Upon information and belief,
28 Sharp Business Systems, Inc. (“Sharp Business Systems”) is a wholly-owned direct

1 or indirect subsidiary of SEC.

2 55. Upon information and belief, Sharp, SEC, and Sharp Business Systems
3 act as a common, unified economic enterprise. Upon information and belief, Sharp
4 Business Systems is a sales division of SEC, which is the United States sales and
5 marketing subsidiary of Sharp. Upon information and belief, Sharp has employees
6 located at offices within and conducts business within this judicial district, including
7 in Pleasanton, California.

8 56. Upon information and belief, Sharp joined the Avanci platform on or
9 about July 12, 2017.

10 **JURISDICTION AND VENUE**

11 57. Continental brings this action for specific performance, declaratory
12 relief, injunctive relief, costs of suit, and reasonable attorneys' fees arising under,
13 *inter alia*, Sections 1 and 2 of the Sherman Act and Section 16 of the Clayton Act,
14 15 U.S.C. §§ 1, 2, 26, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and
15 2202. Accordingly, this Court has jurisdiction to hear this case pursuant to 28
16 U.S.C. §§ 1331 and 1337.

17 58. To the extent any of Continental's claims are deemed to arise under
18 state law, this Court has subject matter jurisdiction over those claims pursuant to 28
19 U.S.C. § 1367, because such claims arise from the same factual nucleus as
20 Continental's federal law claims.

21 59. This Court has personal jurisdiction over each defendant based on their
22 national contacts with the United States as a whole pursuant to 15 U.S.C. § 22, as
23 well as Defendants' relevant contacts with this judicial district. Upon information
24 and belief, each Defendant has conducted and continues to conduct business in this
25 judicial district and/or has engaged in continuous and systematic activities in this
26 judicial district, including licensing activities, demands, and negotiations in
27 California—at least through their agent Avanci.

28 60. Venue is proper in this judicial district pursuant to 28 U.S.C. §1391(b)

1 and (c) and/or 15 U.S.C. § 22.

2 61. Upon information and belief, this Court has personal jurisdiction over
3 defendant Avanci LLC at least pursuant to 15 U.S.C. § 22, as Avanci is incorporated
4 within the United States and therefore has national contacts with the United States.
5 Further, venue is proper over Avanci in this judicial district at least pursuant to 15
6 U.S.C. § 22, as Avanci transacts business within this judicial district.

7 62. Upon information and belief, this Court has personal jurisdiction over
8 defendant Avanci Platform International Limited at least pursuant to 15 U.S.C. § 22,
9 as Avanci Platform International Limited has acted within any district of the United
10 States at least by and through licensing with companies within the United States and
11 therefore has national contacts with the United States. Further, venue is proper over
12 Avanci Platform International Limited in this judicial district at least pursuant to 28
13 U.S.C. § 1391(c)(3).

14 63. Upon information and belief, this Court has personal jurisdiction over
15 defendants Nokia Corporation, Nokia Solutions and Networks Oy, and Nokia
16 Technologies Oy at least pursuant to 15 U.S.C. § 22, as Nokia Corporation, Nokia
17 Solutions and Networks Oy, and Nokia Technologies Oy each have acted within any
18 district of the United States at least by and through their license and preceding
19 negotiations with Avanci, and therefore each has national contacts with the United
20 States. Further, venue is proper over Nokia Corporation, Nokia Solutions and
21 Networks Oy, and Nokia Technologies Oy in this judicial district at least pursuant to
22 28 U.S.C. § 1391(c)(3).

23 64. Upon information and belief, this Court has personal jurisdiction over
24 defendants Nokia of America Corporation and Nokia Solutions and Networks US
25 LLC at least pursuant to 15 U.S.C. § 22, as Nokia of America Corporation and
26 Nokia Solutions and Networks US LLC are incorporated within the United States
27 and therefore have national contacts with the United States. Additionally, personal
28 jurisdiction over defendants Nokia of America Corporation and Nokia Solutions and

1 Networks US LLC is proper in this judicial district due to Nokia of America
2 Corporation and Nokia Solutions and Networks US LLC having substantial and
3 continuous contacts with this judicial district. Further, venue is proper over Nokia
4 of America Corporation and Nokia Solutions and Networks US LLC in this judicial
5 district at least pursuant to 15 U.S.C. § 22, as Nokia of America Corporation and
6 Nokia Solutions and Networks US LLC each transact business within this judicial
7 district.

8 65. Upon information and belief, this Court has personal jurisdiction over
9 defendant Conversant SARL at least pursuant to 15 U.S.C. § 22, as Conversant
10 SARL has acted within any district of the United States at least by and through its
11 license and preceding negotiations with Avanci, and therefore has national contacts
12 with the United States. Additionally, this Court has personal jurisdiction over
13 Conversant SARL at least through its substantial and continuous contacts with this
14 judicial district. Finally, venue is proper over Conversant SARL in this judicial
15 district at least pursuant to 28 U.S.C. § 1391(c)(3).

16 66. Upon information and belief, this Court has personal jurisdiction over
17 defendants Optis Wireless, Optis Cellular, and Optis UP in this judicial district at
18 least pursuant to 15 U.S.C. § 22, as Optis Wireless, Optis Cellular, and Optis UP are
19 incorporated within the United States and therefore have national contacts with the
20 United States. Further, venue is proper over Optis Wireless, Optis Cellular, and
21 Optis UP in this judicial district at least pursuant to 15 U.S.C. § 22, as Optis
22 Wireless, Optis Cellular, and Optis UP all transact business within this judicial
23 district.

24 67. Upon information and belief, this Court has personal jurisdiction over
25 defendant Sharp in this judicial district at least pursuant to 15 U.S.C. § 22, as Sharp
26 has acted within any district of the United States at least by and through its license
27 and preceding negotiations with Avanci, and therefore has national contacts with the
28 United States. Additionally, this Court has personal jurisdiction over Sharp at least

1 through its substantial and continuous contacts with this judicial district. Further,
2 venue is proper over defendant Sharp in this judicial district at least pursuant to 28
3 U.S.C. § 1391(c)(3).

4 **INTRADISTRICT ASSIGNMENT**

5 68. Assignment to the San Jose Division is proper. This action arises in
6 Santa Clara County because a substantial part of the events or omissions which give
7 rise to the claim occurred in Santa Clara County. Continental has a large research
8 and development facility in Santa Clara, with activity that includes a focus on
9 connectivity and mobility services. Defendant Nokia has offices in Sunnyvale, San
10 Jose, and Mountain View. Defendant Conversant has offices and high-level officers
11 located in Palo Alto. Third parties that have information relevant to this action,
12 including other Avanci Members, also have offices in Santa Clara County.

13 **FACTUAL ALLEGATIONS**

14 69. As explained below, Continental brings this action because of
15 Defendants' unlawful refusal to license Continental and other suppliers within the
16 automotive supply chain with respect to their patents asserted to be essential to the
17 2G, 3G, and 4G cellular standards, as well as their failure and refusal to offer
18 FRAND terms and conditions for such a license.

19 **I. Overview of Standard Setting Organizations and Relevant Standards**

20 70. Cellular communications depend on widely distributed networks that
21 implement cellular communications standards. These standards promote availability
22 and interoperability of standardized products regardless of geographic boundary.
23 Cellular standards have evolved over generations, beginning with the "first
24 generation"—or "1G"—standards developed in the 1980s. *See In re Qualcomm*
25 *Antitrust Litig.*, 292 F. Supp. 3d 948, 955 (N.D. Cal. 2017). Second, third, and
26 fourth generation standards followed.

27 71. Industry groups called standard-setting organizations, or SSOs, have
28 emerged to develop and manage the relevant cellular standards. SSOs are voluntary

1 membership organizations whose participants engage in the selection and
2 development of industry technical standards, such as cellular communication
3 standards, which provide important benefits by resolving interoperability problems.
4 Common SSOs in the cellular communications field are the European
5 Telecommunications Standards Institute (“ETSI”), the Telecommunications
6 Industry Association (“TIA”), the Alliance for Telecommunications Industry
7 Solutions (“ATIS”), T1P1, the Association of Radio Industries and Businesses
8 (“ARIB”), the Telecommunications Technology Committee (“TTC”), and the China
9 Communications Standards Association (“CCSA”).

10 72. As work began on third generation—or “3G”—cellular communication
11 standards, collaborations of SSOs formed to ensure global standardization. One
12 such collaboration is the Third Generation Partnership Project (“3GPP”). As 4G
13 technology emerged, 3GPP also developed the 4G LTE family of standards.
14 Another collaboration, the Third Generation Partnership Project 2 (“3GPP2”),
15 focused its 3G standardization efforts on the CDMA2000 standard.

16 73. Individual member SSOs of 3GPP and 3GPP2 are known as
17 Organizational Partners. An Organizational Partner approves and maintains the
18 3GPP or 3GPP2 scope and transposes 3GPP or 3GPP2 technical specifications into
19 the Organizational Partner’s own standards. ETSI, ATIS, ARIB, TTC, and CCSA
20 are all organizational partners of 3GPP. TIA, ARIB, and TTC are all organizational
21 partners of 3GPP2.

22 74. Prior to the adoption of 2G standards, 1G cellular connectivity offered
23 relatively basic functionality, supporting just a few analog signals (as opposed to the
24 digital signals used today). In the late 1980s, the cellular industry began moving
25 towards 2G and considered a number of different standards, including the Global
26 System for Mobile communications (“GSM”), the Generalized Packet Radio System
27 (“GPRS”), Enhanced GPRS (“EDGE”), and Code Division Multiple Access
28 (“CDMA”). Ultimately GSM and CDMA became the primary standards in 2G

1 cellular communications. The two 2G standards were not interoperable; thus a
2 device configured for one network would not operate on the other.

3 75. In the late 1990s, the cellular industry pushed towards 3G, which
4 offered higher transmission speeds, ability to support more users, and improved
5 reliability. The leading 3G standards families were CDMA2000 and the Universal
6 Terrestrial Radio Access (“UTRA”), which operated in various modes around the
7 world, including Wideband CDMA (“WCDMA”) and Time Division Synchronous
8 Code Division Multiple Access (“TD-SCDMA”). The WCDMA standard was also
9 known as Universal Mobile Telecommunications System (“UMTS”), with High
10 Speed Packet Access (“HSPA”) which utilized at least two protocols: High Speed
11 Downlink Packet Access (“HSDPA”) and High Speed Uplink Packet Access
12 (“HSUPA”). Once again, the two main 3G standards were not interoperable, and
13 thus a device configured for a CDMA2000 network would not function on a UMTS
14 network.

15 76. In the late 2000s, the cellular industry came together for 4G to develop
16 a single standard: Evolved UTRA (“E-UTRA”), more commonly referred to as
17 Long Term Evolution (“LTE”). LTE was adopted almost universally as the 4G
18 cellular communication standard.

19 **II. The Importance of FRAND Commitments in the Context of Voluntary** 20 **Standard Setting**

21 77. Although standards deliver economic benefits, they can also present
22 anticompetitive risks that potentially impose excessive and unfair costs on users of
23 the standards, and even hinder broad implementation of the standards. SSO
24 members often own or hold patents covering the technologies adopted into the
25 standards, creating a potential for market-distorting behavior whereby the owners of
26 essential technology attempt to capture not only the value of the patented
27 technology, but also the value of standardization itself. Such behavior could involve
28 refusing to license certain users of the standards, or demanding supra-FRAND

1 royalties that are disproportionate to the value of the essential technology at issue.

2 78. In order to prevent the owner of a patent essential to complying with
3 the standard—the “SEP holder”—from blocking or otherwise inhibiting
4 implementation of a given standard, the relevant cellular SSOs maintain IPR
5 policies which impose certain duties on SEP holders. Such policies require and/or
6 strongly encourage each party that participates in the standard-development process
7 to disclose on a timely, bona fide basis, all intellectual property rights they are aware
8 of and believe may be essential to a proposed standard. *See, e.g.*, ETSI IPR Policy,
9 § 4.1; TIA IPR Policy, § 3.1.2; ATIS Operating Procedure, § 10.4.2 at 10.

10 79. The relevant SSO IPR policies additionally require members who wish
11 to voluntarily contribute essential IPR to the standards to commit to license their
12 asserted SEPs to firms implementing the standard on FRAND terms and conditions.
13 *See, e.g.*, ETSI IPR Policy, § 6.1; TIA IPR Policy, § 3.1.1; ATIS Operating
14 Procedure, § 10.4.2 at 10, 11. These FRAND commitments are recognized as
15 encumbrances that bind all successors-in-interest to such asserted SEPs. *See, e.g.*,
16 ETSI IPR Policy, § 6.1bis; TIA IPR Policy, § 3.1.1; ATIS Operating Procedure, §
17 10.4.2 at 11.

18 80. Moreover, it has been judicially determined that, *as a matter of law*, the
19 TIA and ATIS IPR policies require a SEP holder to license its alleged SEPs on
20 FRAND terms and conditions to any implementer within a given supply chain that
21 uses the standards, and not merely to the manufacturers of “end-products.” There is
22 no material difference between the TIA and ATIS IPR policies and those of ETSI
23 and other SSOs that have adopted the same cellular standards. Accordingly,
24 Defendants have a duty to license users of relevant cellular standards within the
25 automotive supply chain, including component suppliers like Continental, regardless
26 of their position within that supply chain.

27 81. By voluntarily undertaking FRAND licensing commitments, SEP
28 holders benefit from the broad implementation of their patented technologies as a

1 result of standardization, which significantly expands the pool of licensees who
2 must practice any essential patents to all those who produce and sell standard-
3 compliant products. In exchange, the SEP holders agree not to abuse the market
4 power resulting from the patent’s incorporation into the standard to the exclusion of
5 other alternatives.

6 82. These FRAND commitments provide firms that implement the
7 standard—such as Continental— the assurance that they will always have access to
8 the essential technology and will not be denied access to the standardized
9 technology or disadvantaged relative to others if they invest in implementing the
10 standard or developing innovative products that may operate with the standard.

11 83. When SEPs are not available for FRAND licensing, the relevant SSOs
12 have an obligation to reassess, and then revise or even abandon the portions of their
13 standards that rely on such essential proprietary technologies. For example, under
14 the ETSI IPR Policy, “[w]here prior to the publication of a STANDARD or a
15 TECHNICAL SPECIFICATION, an IPR owner informs ETSI that it is not prepared
16 to license an IPR” on FRAND terms pursuant to the policy, ETSI is required to
17 select another “viable alternative technology” solution “which is not blocked by that
18 IPR and satisfies ETSI’s requirements.” *Id.*, § 8.1.1. If no such viable solution
19 exists, then work on the standard “shall cease[.]” The TIA IPR Policy similarly
20 provides that in the absence of the required FRAND commitment, the standard is to
21 be “referred back to the Formulating Group for further consideration[.]” TIA IPR
22 Policy § 4 at 11-12, and may be withdrawn by TIA, *id.* § 3.1.3 at 9-10. Other
23 relevant SSOs have policies similar to the policies at ETSI and TIA.

24 84. Thus, by making an affirmative and voluntary FRAND commitment, an
25 SEP holder intentionally displaces the process within the SSOs whereby SSO
26 members are duty-bound to re-evaluate their technical specifications when the
27 unavailability of an essential technology under consideration is timely brought to
28 their attention.

1 85. Accordingly, to the extent that SSO participants may not have had the
2 opportunity to consider alternatives that were available for FRAND licensing, or to
3 withdraw the portions of the standards where no such alternative was available, such
4 failure was directly due to Defendant Licensors' affirmative FRAND licensing
5 representations that induced the SSO participants to forego such opportunity.

6 **III. Defendants' FRAND Commitments to SSOs**

7 86. Upon information and belief, certain Defendants are directly obligated
8 to license their SEPs on FRAND terms and conditions by virtue of the declarations
9 they made with regard to their own patents. Moreover, upon information and belief,
10 certain defendants are either successors-in-interest to or otherwise the authorized
11 licensing agents for certain alleged SEPs that were originally declared to be essential
12 to standards by other SEP holders who gave irrevocable FRAND licensing
13 commitments and are obligated to license any SEPs they own or control on FRAND
14 terms and conditions.

15 87. Defendant Nokia has participated in the cellular standard setting
16 process through membership in various SSOs, including ETSI, TTA, and ATIS. On
17 information and belief, Nokia has declared that certain of its patents or patent
18 applications may be or may become essential to cellular standards under
19 consideration by such SSOs, and committed to grant licenses to the disclosed
20 patents on FRAND terms and conditions.

21 88. Nokia made these declarations to ensure that the cellular standards
22 incorporated Nokia's technologies to the exclusion of alternatives, such that
23 manufacturers of standard-compliant devices would require a license to Nokia's
24 alleged SEPs. While making such declarations to the relevant SSOs, Nokia
25 concealed its intent to, among other things, refuse to license certain users of the
26 standards in a given supply chain, charge supra-competitive royalty rates, and
27 demand discriminatory terms and conditions for a license to its alleged SEPs. The
28 intent of this concealment was to deceive and induce the relevant SSOs to adopt

1 technologies Nokia declared to be essential to the standards.

2 89. Defendant Conversant has participated in the cellular standard setting
3 process through its membership in at least ETSI. Conversant has declared that
4 certain of its patents or patent applications may be or may become essential to
5 cellular standards adopted by ETSI, and committed to grant licenses to the disclosed
6 patents on FRAND terms and conditions.

7 90. Conversant made these declarations to ensure that the cellular standards
8 incorporated Conversant's technologies to the exclusion of alternatives, such that
9 manufacturers of standard-compliant devices would require a license to
10 Conversant's alleged SEPs. While making such declarations to the relevant SSOs,
11 Conversant concealed its intent to, among other things, refuse to license certain
12 users of the standards in a given supply chain, charge supra-competitive royalty
13 rates, and demand discriminatory terms and conditions for a license to its alleged
14 SEPs. The intent of this concealment was to deceive and induce the relevant SSOs
15 to adopt technologies Conversant declared to be essential to the standards.

16 91. Upon information and belief, Conversant is either an assignee or the
17 licensing agent of certain original alleged SEP holders for certain cellular SEPs that
18 are the subject of FRAND commitments, including, on information and belief, many
19 patents declared by Nokia to be essential to various cellular standards and subject to
20 irrevocable FRAND commitments. Conversant acknowledges that its portfolio
21 includes many declared SEPs that it seeks to license on FRAND terms. (*See*
22 [http://www.conversantip.com/news-article/conversant-wireless-files-uk-patent-
infringement-and-frand-case-against-huawei-and-zte/](http://www.conversantip.com/news-article/conversant-wireless-files-uk-patent-
23 infringement-and-frand-case-against-huawei-and-zte/).)

24 92. Defendant PanOptis has participated in the cellular standard setting
25 process through ETSI, TIA, and ATIS. Indeed, PanOptis has declared, to at least
26 ETSI, that certain of its patents or patent applications may be or may become
27 essential to cellular standards under consideration, with such declarations
28 committing PanOptis to grant licenses to the disclosed patents on FRAND terms and

1 conditions.

2 93. PanOptis made these declarations to ensure that the cellular standards
3 incorporated PanOptis's technologies to the exclusion of alternative technologies,
4 and also so that manufacturers of standard-implementing devices would require a
5 license to PanOptis's alleged SEPs. While making the above declarations to at least
6 ETSI, PanOptis concealed its intent to, among other things, charge supra-
7 competitive royalty rates and demand discriminatory terms and conditions for a
8 license to its alleged SEPs. The intent of this concealment was to deceive at least
9 ETSI members so that technologies PanOptis claims to have patented were included
10 in the standards.

11 94. Upon information and belief, PanOptis is at a minimum an assignee or
12 the licensing agent of original alleged SEP holders for certain cellular SEPs that are
13 subject to FRAND commitments to various SSOs, including patents declared by at
14 least LG, Ericsson, and Panasonic to be essential to various cellular standards and
15 subject to irrevocable FRAND commitments. PanOptis recognizes its duty to
16 license those SEPs on FRAND terms. (*See* <http://www.panoptis.com/>.)

17 95. Upon information and belief, defendant Optis UP is at a minimum an
18 assignee or the licensing agent of original alleged SEP holders for certain cellular
19 SEPs that are subject to FRAND commitments to various SSOs, including patents
20 declared essential to various cellular standards and subject to irrevocable FRAND
21 commitments made to at least ETSI by Ericsson. Indeed, Optis UP obtained its
22 patent portfolio from Unwired Planet who was similarly subject to the irrevocable
23 FRAND commitments made by Ericsson and other assignees. Such FRAND
24 commitments were made by SEP holders, including Ericsson, without disclosing
25 their intent to, among other things, charge supra-competitive royalty rates and
26 demand discriminatory terms and conditions for a license to their alleged SEPs.
27 SSO members relied on such unqualified FRAND commitments when they adopted
28 such patented technologies into standards.

1 96. Defendant Sharp has participated in the cellular standard setting
2 process through membership in various SSOs, including ETSI. On information and
3 belief, Sharp has declared that certain of its patents or patent applications may be or
4 may become essential to cellular standards under consideration by such SSOs, and
5 committed to grant licenses to the disclosed patents on FRAND terms and
6 conditions.

7 97. Sharp made these declarations to ensure that the cellular standards
8 incorporated Sharp's technologies to the exclusion of alternatives, such that
9 manufacturers of standard-compliant devices would require a license to Sharp's
10 alleged SEPs. While making such declarations to the relevant SSOs, Sharp
11 concealed its intent to, among other things, refuse to license certain users of the
12 standards in a given supply chain, charge supra-competitive royalty rates, and
13 demand discriminatory terms and conditions for a license to its alleged SEPs. The
14 intent of this concealment was to deceive and induce the relevant SSOs to adopt
15 technologies Sharp declared to be essential to the standards.

16 98. Upon information and belief, Avanci members have all committed to
17 license their alleged SEPs that are part of the Avanci licensing platform on FRAND
18 terms pursuant to the IPR policies of various SSOs either directly, or indirectly
19 through their predecessors-in-interest and/or principals. Such FRAND
20 commitments were made without disclosing an intent to, among other things, refuse
21 to license certain users, charge supra-competitive royalty rates and demand
22 discriminatory terms and/or conditions for a license to any relevant SEPs. SSO
23 members relied on such unqualified FRAND commitments when they adopted such
24 patented technologies into standards.

25 99. As described above, all of the alleged SEPs for which Avanci acts as
26 licensing agent are encumbered by FRAND obligations, thus similarly obligating
27 Avanci to also license them on FRAND terms and conditions. Indeed, Avanci also
28 has made public statements that it will, and is obligated to, license the patents which

1 have been committed to collective licensing by Avanci pursuant to the agency
2 agreement with its members, on FRAND terms and conditions. For example, on its
3 website, Avanci asks itself whether “Avanci licensing [is] on FRAND terms?”, and
4 answers that question by saying “Absolutely. Avanci shares a commitment with the
5 IoT ecosystem to make the latest technology available in a way that is fair,
6 reasonable and non-discriminatory (FRAND).” (See www.avanci.com/faq/.)

7 100. Avanci has also publicly acknowledged its obligation to offer licenses
8 to any willing licensee, claiming, “We’re serious about our responsibility to being
9 fair and equitable. . . . Our transparent, open marketplace is *accessible to*
10 *everyone*—ensuring those companies . . . using the technologies get a fair price,
11 enabling them to continue developing the future of connected products.” (See
12 www.avanci.com/vision) (emphasis added).) Unfortunately, Avanci has not
13 behaved consistent with this statement, because it will *not* license all companies
14 who make standard-compliant products, its pricing methodology is *not* transparent,
15 and the cost of an Avanci license is *not* at “a fair price.”

16 101. Because SSOs and users of the standards alike reasonably relied on
17 FRAND promises made by the original SEP holders in adopting and implementing
18 the standards at issue, such FRAND commitments have been recognized as
19 encumbrances that bind subsequent licensors and transferees of such patents. *See,*
20 *e.g.,* ETSI IPR Policy, § 6.1bis. This interpretation of FRAND is consistent with the
21 IPR policies of all relevant SSOs which are intended to ensure the availability of the
22 standardized technologies to any standards implementer. Otherwise, SEP holders
23 could subvert those policies by simply transferring those SEPs to other entities or
24 delegating their licensing to others who did not make the original FRAND promises.

25 102. Accordingly, to the extent certain Defendants, including Avanci,
26 PanOptis, and Conversant, are either the licensing agents for or successors-in-
27 interest of relevant FRAND-encumbered SEPs, they have the same irrevocable
28 FRAND licensing obligations as the original declarants, and either knew or should

1 have known of the original transferees' FRAND promises and the resulting reliance
2 by the SSOs and users of the standards alike.

3 **IV. The Automotive Industry Supply Chain**

4 103. In the automotive industry, there is a well-established "division of
5 labor" at least between the OEMs (*e.g.*, automobile manufacturers) and their Tier 1
6 suppliers (*e.g.*, Continental). Tier 1 suppliers like Continental are much more than
7 manufacturing companies. Rather, they have the in-depth know-how and expertise
8 to manufacture and constantly research and develop (and re-develop) a large number
9 of complex automotive components that must be implemented in different vehicles
10 manufactured by different OEMs. Automotive OEMs then assemble the various
11 components obtained from their various Tier 1 suppliers and combine them into the
12 final vehicle. In this sense, Tier 1 suppliers are one of the driving forces in the
13 technological development of the automotive industry. For example, in the TCU
14 context, Tier 1 suppliers must determine the sub-components necessary for cellular
15 connectivity and have the expertise to design a product (the TCU) that not only fits
16 into the OEM's vehicle, but also seamlessly integrates with the vehicle's existing
17 user interface.

18 104. Tier 1 suppliers source components and subsystems, such as NADs,
19 necessary for the products they manufacture from Tier 2 suppliers. In turn, Tier 2
20 suppliers source the components necessary for their products from Tier 3 suppliers
21 (manufacturers of the baseband processor, in the case of the TCU). The
22 manufacturers of the baseband processor chipsets provide their reference design to
23 the Tier 2 suppliers in order to facilitate the making of a tested and functional
24 modem for later use in the TCU.

25 105. Automotive OEMs are highly sophisticated purchasers with the ability
26 to exercise significant buyer power. Automotive OEMs often initiate fierce bidding
27 competitions in so-called "Request for Quotes" ("RFQs"). Often, the winning bid is
28 the supplier with the ability to provide a product meeting the OEM's specifications

1 at the lowest price. Additionally, this significant buyer power allows OEMs to
2 traditionally require their suppliers to deliver components “free of (third party)
3 rights.” Specifically, such requirements typically include assurances that the
4 products supplied to the OEM do not violate patents or other intellectual property
5 rights, as well as indemnification clauses obliging the Tier 1 supplier to indemnify
6 the respective OEM for any royalties the OEM might pay for using and/or selling
7 the product as part of a vehicle.

8 106. Accordingly, Continental has a strong interest in obtaining adequate
9 licensing to patents that may cover cellular standards implemented by the products it
10 supplies to automotive OEMs. However, Continental cannot do so because
11 Defendants collectively have agreed to refuse to directly license Continental and its
12 suppliers as part of a concerted scheme to charge elevated royalties to OEMs. Even
13 though Defendants refuse to license Continental directly, Continental bears the cost
14 of Defendants’ supra-competitive and non-FRAND royalties as alleged herein.
15 Accordingly, Continental is a direct victim of Defendants’ anticompetitive scheme
16 (and arguably the most direct victim) and is best positioned to bring this action to
17 seek to enforce the antitrust laws and Defendants’ FRAND licensing commitments.

18 **V. The Formation of Avanci as a Collusive Vehicle to Raise the Price of**
19 **Utilizing Cellular Standards for IoT Applications**

20 107. Avanci is a purported “licensing platform” claiming to offer “one-stop”
21 access to essential patented technology for wireless connected devices that are part
22 of the Internet of Things, or “IoT.” To do so, Avanci acts as a licensing agent for a
23 large group of patent owners and traditional patent licensors. Presently, Avanci
24 claims to act as a licensing agent for at least BlackBerry, BT Group, China Mobile,
25 KPN, NTT Docomo, Ericsson, Fujitsu Ltd., Innovative Sonic, InterDigital, IP
26 Bridge, NEC, Nippon Telegraph and Telephone Corporation (“NTT”), Panasonic,
27 Qualcomm, Siemens, Sony, TNO, Vodafone, and ZTE (collectively, the “Non-Party
28 Licensors”), as well as the Defendant Licensors.

1 108. Upon information and belief, Avanci was formed in or around
2 September 2016, primarily by Ericsson and Qualcomm, two of the largest cellular
3 SEP licensors in the handset (*e.g.*, smartphone) industry. Ericsson and Qualcomm
4 have long exploited the handset industry through their lucrative licensing business
5 model, whereby both refuse to license suppliers of baseband processors in order to
6 preserve their ability to collect supra-FRAND royalties from downstream handset
7 manufacturers.

8 109. In recent years, this practice has come under increasing scrutiny by
9 regulators worldwide, as well as the courts. For example, in an enforcement action
10 brought by the United States Federal Trade Commission against Qualcomm for,
11 among other things, refusing to license baseband processor suppliers, the district
12 court “conclude[d] that the TIA and ATIS IPR policies require Qualcomm to license
13 its SEPs to modem chip suppliers.” *Federal Trade Comm’n v. Qualcomm, Inc.*,
14 Case No. 5:17-cv-00220-LHK, ECF 931 at 25 (N.D. Cal. Nov. 6, 2018). After
15 extensive investigation, the Korea Fair Trade Commission (“KFTC”) similarly
16 ordered that Qualcomm “shall negotiate licensing terms with the modem chipset
17 manufacturer that is willing to enter into licensing in good faith”

18 110. Ericsson, for its part, has also come under scrutiny for its excessive
19 demands from handset manufacturers, with a court recently concluding that
20 Ericsson’s licensing offers to TCL, a handset manufacturer, were not FRAND, and
21 setting FRAND rates that were far below Ericsson’s demands. *See TCL Commc’n*
22 *Tech. Holdings v. Telefonaktiebolaget LM Ericsson*, No: SACV 14-341
23 *JVS(DFMx)*, 2018 WL 4488286 (C.D. Cal. Sep. 14, 2018).

24 111. The emergence of the IoT, with various connected products like cars
25 and smart meters, presented large SEP holders with an opportunity to tap into a new
26 and enormous growing market for the licensing of their asserted SEPs. At the same
27 time, these SEP holders also wanted to preserve their ability to continue to extract
28 supra-FRAND licensing revenues. Thus, they colluded to create Avanci, which

1 would act as the “agent” for the licensing of their asserted cellular SEPs and those of
2 others who would join them in the scheme. The Avanci Members, including
3 Defendant Licensors, knew that, collectively through Avanci, they would have
4 much greater bargaining power to extract elevated, supra-FRAND royalties than
5 each would have individually. The larger the number of alleged SEPs included in
6 the “platform” (*i.e.*, pool), the greater pressure they could collectively exert on
7 companies who need a license to practice the standards, and the higher royalties they
8 could demand by collectively boycotting certain implementers in the supply chain.
9 Thus, the agreement to collectively license their asserted SEPs on non-FRAND
10 terms was a mechanism by which Defendant Licensors and other Avanci Members
11 could enhance and maintain the monopoly power they obtained through
12 standardization by enhancing their collective ability to exploit that power.

13 112. Avanci was then authorized through a multilateral agreement with and
14 among its members to offer a collective license to its members’ SEPs only to
15 manufacturers at the very end of a supply chain, like car OEMs. To give the scheme
16 the superficial appearance of reasonableness, Avanci would charge a “flat” royalty
17 which varied with the type and price of the end-product implementing the cellular
18 standards. Thus, the royalty for a car (a significantly more expensive end-product)
19 would be set higher than the royalty for a smart meter (a less expensive product), even
20 though both products implement the particular standards by using a baseband
21 processor. Further, Avanci would only target car OEMs even though there are
22 several intermediate (and vastly less expensive) components between the baseband
23 processor and the car which likewise implement the standards (namely, NADs and
24 TCUs), and are more analogous to a handset than a car is. This scheme allowed
25 Defendants and other Avanci Members to maintain and, indeed, further extend their
26 end-product level licensing model in a way that is even further removed from the
27 core components which practice the standards, but would ensure the most revenue
28 possible for the licensors.

1 113. At the heart of Defendants' scheme was the collective agreement
2 among Avanci Members to not directly license upstream suppliers, such as suppliers
3 of baseband processors, NADs, and TCUs within the automotive supply chain.
4 Avanci has admitted to Continental that it lacks the authority, pursuant to its
5 multilateral agreement with its members, to offer a license to Continental. As
6 alleged herein, this concerted refusal to license was a necessary mechanism for
7 achieving Avanci's collective supra-FRAND royalties which could not be sustained
8 if charged directly to suppliers in the supply chain with much smaller prices and
9 margins. Moreover, Defendants knew that a FRAND license to Tier 1, Tier 2, or
10 Tier 3 suppliers would exhaust Avanci's ability to license car OEMs at much higher
11 royalties.

12 114. In keeping with this collective agreement, Avanci notified Continental
13 that it would only seek authorization from its members to license Continental if
14 Continental agreed in advance to pay the same inflated rates Avanci demands from
15 the car OEMs, knowing fully well that Continental could not agree to such an
16 unreasonable demand. The result is that Defendants are able to collectively
17 maintain cellular SEP licensing costs at higher levels than their FRAND obligations
18 permit.

19 115. Patent pools may be efficient by reducing the transactional costs of
20 negotiating separate licenses with individual licensors. However, any efficiency
21 benefits quickly evaporate when a pool fails to incorporate structural protections to
22 avoid illegal coordination among a large number of licensors in the pool. Such
23 structural protections include, *at a minimum*, a pool's commitment to FRAND
24 licensing of *any* willing licensee regardless of its level within the supply chain; the
25 availability of FRAND licenses from individual licensors; and ensuring the validity
26 and essentiality of all of the patents within the pool to minimize the risk of
27 anticompetitive coordination, such as price fixing or tying of non-essential
28 technologies. As alleged herein, Avanci falls far short of offering such

1 protections. Not only does Avanci expressly refuse to license willing suppliers
2 within the chain based on its multilateral agreement with its members, but also some
3 of its assertedly largest SEP holder members have publicly indicated they do not
4 license their SEPs to any implementers other than the end-product manufacturers
5 (here, purportedly car manufacturers). Moreover, Avanci fails to offer transparency
6 as to what patents are included for licensing within the Avanci “marketplace,” and
7 the steps taken to ensure that each and every patent being licensed as purportedly
8 “essential” is in fact valid and essential to a relevant standard.

9 116. On information and belief, and despite Avanci’s claim to the contrary,
10 not all patents offered by Avanci for collective licensing are essential to cellular
11 standards. Many are non-essential patents that are not necessary to practice the
12 standards and have alternatives in or outside of the “platform,” thus resulting in
13 price fixing and/or illegal tying of non-essential and competing technologies which
14 are not necessary to practice the standards.

15 117. Indeed, other than the initial over-declarations of potential essentiality,
16 which are unchecked by SSOs, there is no disclosure by Avanci or Defendant
17 Licensors whatsoever identifying the precise patents, or even the number of those
18 patents, that Avanci claims have been determined to be essential and thus offered for
19 licensing by Avanci. Moreover, Avanci has made no disclosure of the actual
20 process by which its supposed experts have made essentiality determinations, nor
21 has it identified a process by which potential licensees can challenge the essentiality
22 determinations of any supposed SEP.

23 118. Avanci’s lack of transparency has thus made it impossible for
24 Continental or other users of the standards to evaluate Avanci’s claims as to the
25 essentiality of the patents it purports to license. For example, there is no
26 information as to the number of patents submitted by each licensor member, or the
27 number or proportion of those submissions that were rejected as non-essential.
28 Indeed, Avanci and its members have every incentive to artificially inflate the

1 number of the patents in the pool to justify their elevated and non-FRAND royalty
2 demands.

3 **VI. Defendants' and Their Co-Conspirators' Extensive and Ongoing**
4 **Anticompetitive Conduct**

5 119. Prior to adoption of a standard, there are generally multiple alternative
6 technology solutions competing to perform any given functionality. During the
7 standard setting process, SSO participants evaluate and then select the appropriate
8 technology, among alternatives, to fulfill each individual function required to
9 practice the relevant standard. This process includes considering the technical
10 merits of any alternative, and also whether any alternative is based on proprietary
11 technology and if such proprietary technology is available for licensing on FRAND
12 terms and conditions. If an alternative is not available for FRAND licensing, the
13 relevant SSOs are required to reassess their options or even withdraw the portion of
14 the standard that relies on such proprietary technology.

15 120. Thus, before a standard is adopted, all of the potential alternative
16 technologies capable of performing each particular function within a 2G, 3G, or 4G
17 standard compete in a relevant product market. These product markets are
18 collectively referred to for a particular standard as “technology markets.” For
19 example, with respect to much of the functionality within the 3G UMTS and LTE
20 standards, alternative technologies prior to standardization (*e.g.*, tDocs or technical
21 submissions) were regularly proposed to the SSOs by companies that are not
22 members of Avanci. These technologies all competed in a relevant technology
23 market for the stated functionality. Thus, ETSI could have adopted any of these
24 alternatives (in whole or in part) as part of the 3G UMTS and 4G LTE standards.
25 To the extent Defendant Licensors claim that their purported technology is essential
26 to the stated functionality and thus adopted into the standard, ETSI relied on
27 Defendant Licensor’s FRAND licensing commitments in adopting their proprietary
28 technology.

1 121. Subsequent to standardization, however, other technological
2 alternatives no longer compete with the standardized technology, which by
3 definition was adopted over the alternatives. Thus, for as long as the standard
4 remains in use, no viable substitutes exist post-standardization for the technology
5 embodied in a relevant SEP. As a result, the incorporation of a patent into a
6 standard makes the scope of the relevant technology market for each specific
7 functionality of a standard congruent with that of the patent asserted to be essential
8 to that particular functionality of the standard. Examples of technology markets
9 and/or submarkets post-standardization include the specific patents and/or patent
10 applications that each Defendant Licensor claims are essential to the 2G, 3G, or 4G
11 cellular standards that were identified in their respective licensing declarations to
12 ETSI, TTA, ATIS and/or other relevant SSOs. Thus, after standardization, each
13 Defendant Licensor became the only commercially viable technology supplier in
14 each of the relevant technology markets for which its patented technology became
15 standardized. Accordingly, standards implementers, including Continental, could no
16 longer substitute the adopted technologies with any other alternatives. As a result,
17 each Defendant Licensor possesses monopoly power in a relevant technology
18 market for its standardized patented technology, and a dominant share of that
19 market, allowing it to extract supra-FRAND royalties and exclude companies in the
20 downstream markets that utilize the standards.

21 122. The relevant SSOs require FRAND commitments from SEP holders
22 precisely to impose a limit on such exercise of otherwise unchecked monopoly
23 power that results from collective standard setting. When, as alleged herein, SEP
24 holders intentionally renege on their voluntary FRAND bargain with the SSOs, they
25 subvert the very safeguards that shield collective standard-setting activity from
26 violating the antitrust laws.

27 123. Despite SSOs adopting IPR policies incorporating FRAND
28 commitments, some SEP owners, including Defendant Licensors, have attempted to

1 abuse their monopoly power arising from the standardization process to exclude
2 certain implementers from practicing the standards and extract supra-competitive
3 royalty rates after companies are locked into the standardized technology. Such
4 exploitation of SEPs in an effort to extract unreasonable or discriminatory royalties
5 is referred to as patent “hold-up.” The cumulative royalty burden that would be
6 required to satisfy all SEP holders’ royalty demands is referred to as royalty
7 stacking.

8 124. Hold-up harms competition and impedes broad implementation of
9 standards, diminishing any benefits that flow from widespread adoption of the
10 standard. The anticompetitive effects of hold-up are magnified when the total
11 aggregate royalty stack would be unreasonable relative to prices and margins of the
12 product that implements the standards. The total royalty stack must be reasonable
13 when viewed in the aggregate. The demands of individual SEP owners must be
14 assessed in light of the total number of SEPs included in the standard and their
15 relative technical contributions. It has been recognized that patent hold-up is a
16 widespread problem, given that royalty demands by many SEP holders significantly
17 exceed adjudicated FRAND rates.

18 125. Legal precedent and economic analysis have made clear that FRAND
19 principles are only effective when, at least, (a) royalties for essential technology are
20 limited to the *ex ante* value of the alleged SEP(s) when the SEP still competed with
21 other alternatives for inclusion in the standard; (b) such royalties exclude the
22 additional value the technology gains solely from being broadly adopted into
23 standards; and (c) licenses are offered to any user of the standards on
24 nondiscriminatory terms such that an end-product manufacturer is not forced to pay
25 a higher royalty for implementing a given SEP technology than could be justified
26 relative to the royalty payable by a component manufacturer that implements the
27 same SEP for the same functionality.

28 126. By refusing to adhere to such basic FRAND principles in violation of

1 their express and voluntary FRAND commitments, Defendant Licensors have been
2 illegally maintaining the monopoly power they initially obtained when their
3 patented technologies became standardized as a direct result of their FRAND
4 commitments. Defendant Licensors' illegal exploitation of their monopoly power in
5 their standardized proprietary technologies has raised SEP royalty costs to levels
6 that are unsustainable for implementers like Continental and other TCU suppliers.
7 Despite Defendant Licensors' refusal to license them, TCU suppliers nonetheless
8 directly bear the burden of such supra-FRAND royalties in the form of indemnity
9 obligations and costs. Such costs often exceed the available margins on TCUs. As
10 a result of this supplier boycott, if left unchecked, Defendant Licensors could force
11 many TCU suppliers out of the market, or cause them to reduce investing in new
12 and better TCU functionalities to the detriment of competition and consumers.

13 127. In addition to the technology markets described above, there exists a
14 market for the licensing of SEPs relevant to 2G, 3G, and 4G cellular standards.
15 Such a market is relevant to the conspiracy claims alleged herein and is a market
16 directly restrained by the conspiratorial conduct alleged herein. In a competitive
17 SEP licensing market, untarnished by illegal coordination among large SEP holders,
18 the terms, including the price, on which one large SEP holder would offer to license
19 its cellular SEPs would competitively discipline the terms that could be offered by
20 other SEP holders. Absent collusion, SEP holders would compete in setting the
21 licensing terms for a SEP license due to the fact that all of the SEPs at issue are
22 subject to common FRAND commitments. For example, if one large SEP licensor
23 were to offer to license its cellular SEPs exhaustively to component suppliers at a
24 FRAND rate, such a license would establish a precedent that would effectively limit
25 the ability of other SEP holders to discriminate against component suppliers. In
26 addition, those FRAND obligations impose a reasonable aggregate limit on all SEP
27 holders and so the royalty charged by one large SEP holder competitively
28 disciplines the royalties that others may charge. The fact that different FRAND-

1 encumbered SEPs relevant to particular cellular standards do not directly compete
2 with each other does not affect this competitive dynamic related to the licensing of
3 those SEPs.

4 128. Thus, there exists a great degree of incentive for illegal coordination in
5 particular among large SEP holders to collusively set the terms of an SEP license in
6 order to establish a floor for licensing terms, and minimize or eliminate competition
7 in setting terms for SEP licenses. That is precisely what has happened here. Rather
8 than competing to establish FRAND licensing terms, Defendants have colluded with
9 other Avanci Members to restrain and eliminate such competition. Avanci Members
10 include some of the largest purported SEP holders, including Qualcomm, Nokia,
11 Ericsson, and InterDigital, among others, who together claim to own the bulk of the
12 SEPs related to 2G, 3G, and/or 4G cellular standards. After Nokia joined Avanci as
13 a member in late 2018, Avanci's Chief Executive Officer, Kasim Alfalahi, issued a
14 statement claiming that the platform "now offers a licence [sic] covering a vast
15 majority of the world's cellular standard essential patents," although he stopped
16 short of disclosing the actual percentage of SEPs Avanci purports to license. While
17 any of these SEP holders could have licensed its SEPs individually outside of the
18 platform on competitive FRAND terms, including to component suppliers, they
19 instead collusively agreed amongst themselves and with other Avanci Members,
20 including Defendants, to collectively refuse to license component suppliers within
21 the automotive supply chain and to otherwise fix the terms of an SEP license,
22 including supra-competitive royalties on end-products that bear no relationship to
23 the actual value of the alleged SEPs at issue.

24 129. An example of such a collusive agreement is expressly memorialized in
25 a multilateral agreement among Avanci Members and Avanci. That multilateral
26 agreement restrains each Avanci Member from offering a license in competition
27 with an Avanci licensing program in any manner that would hinder Avanci's ability
28 to collect its full stated supra-FRAND royalty at the end-user device level—here,

1 the automobile. While Avanci indicates that each Avanci Member may offer an
2 individual license to its SEPs outside of the “platform,” the Avanci Members’
3 multilateral agreement nonetheless requires each Avanci Member to ensure that its
4 individual licenses do not adversely affect Avanci’s ability to collect its full stated
5 price. The multilateral agreement thus expressly provides that the existence of an
6 individual license by any Avanci Member would not affect the terms and conditions
7 for any Avanci licensing program, including any royalty terms offered by Avanci
8 for such a licensing program that would include the individually-licensed patents.
9 Because fully exhaustive individual licenses would subject Avanci to double-
10 dipping and exhaustion claims with respect to an Avanci Member’s separately-
11 licensed SEPs, it is practically impossible for members to offer individual licenses
12 to suppliers that are fully exhaustive and yet avoid any effect on Avanci’s ability to
13 collect its full stated price from car OEMs. As a result, Avanci Members have no
14 incentive to compete—and thus effectively do not compete—with each other or with
15 Avanci in offering competitive SEP license terms, including fully exhaustive
16 licenses, to component suppliers.

17 130. Continental is informed and believes, and thereupon alleges, that in
18 addition to the collusive express multilateral agreement among Avanci and Avanci
19 Members, alleged above, there exist other agreements and/or understandings—tacit
20 or express—between and among Defendants and their co-conspirators to fix the
21 terms and conditions of an SEP license, including agreements or understandings to
22 individually boycott certain implementers, and/or offer terms with the same
23 practical effect of a refusal to deal with such implementers. The purpose of such
24 agreements is to raise and/or maintain SEP royalties and other SEP licensing terms
25 at supra-competitive and non-FRAND levels, by collectively forcing potential
26 licensees to obtain a joint license from Avanci instead. For example, while Avanci
27 indicated that Continental could attempt to seek individual licenses from its
28 members at the component level, Defendant Licensors have refused to directly

1 license Continental and its suppliers on FRAND terms as alleged herein, including
2 in Section VII, below. Through such collusive agreements or understandings,
3 Defendants and other Avanci Members have thus agreed to eliminate competition in
4 offering FRAND terms and conditions for an SEP license, thus harming competition
5 in the market for the licensing of 2G, 3G, and 4G cellular SEPs, and raising royalty
6 costs to implementers, including TCU manufacturers, and ultimately consumers
7 who must bear those higher costs either in higher prices, or reduced innovation and
8 functionality in TCUs and cars that incorporate them.

9 131. Defendants' collusive conduct also threatens to unreasonably restrain
10 competition, innovation and investment in the markets for the baseband processors
11 that implement the 2G, 3G, 4G, and/or eCall functionalities and standards. As
12 alleged herein, baseband processors are the components that most directly
13 implement and substantially, if not fully, practice the cellular standards. Such
14 components are essential inputs for purposes of manufacturing TCUs with cellular
15 functionality. Baseband processor suppliers—sometimes referred to as Tier 3
16 suppliers—supply basebands to Tier 2 NAD suppliers for incorporation into NADs,
17 which are then supplied to Tier 1 TCU suppliers, like Continental, as subsystems
18 that are incorporated into their TCUs. Baseband processor suppliers include
19 Qualcomm (a key Avanci Member), and to a lesser extent MediaTek, Intel, and
20 Samsung System LSI. However, Qualcomm remains by far the largest supplier of
21 baseband processors and has always held a significant lead—due to its historically
22 dominant position—in baseband processors with new and premium functionalities.
23 Qualcomm is also by far the largest supplier of CDMA-compliant baseband
24 processors in the world, as well as multimode baseband processors which are
25 capable of operating on all major cellular networks, including all 2G (*e.g.*, CDMA,
26 GSM), 3G (*e.g.*, CDMA, UMTS, TDSCDMA, etc.), and 4G LTE networks.
27 According to a leading industry analyst company, Strategy Analytics, as of Q1
28 2018, Qualcomm's revenue share of the overall baseband processor market was

1 roughly 52%, with its second largest competitor, MediaTek, having only a 13%
2 share, followed by Samsung System LSI at 14%. The remaining competitors,
3 including Intel, had a combined share of roughly 21%. Thus, Qualcomm has a
4 significant lead over its competitors both in market share and technology.

5 132. Continental is informed and believes, and thereupon alleges, that in
6 addition to the collusive agreements alleged above, there exist agreements or
7 understandings—tacit or express—among Defendants and their unnamed co-
8 conspirators that they would collectively offer royalty discounts, rebates, marketing
9 support and/or other incentives (collectively “inducements”) to any car OEM whose
10 products utilize Qualcomm baseband processors for cellular connectivity. Such
11 inducements would not be available to OEMs who use a TCU or NAD that utilizes a
12 baseband processor chipset from other chipset competitors. As a result, OEMs
13 would have no incentive to purchase TCUs or NADs that would utilize a competing
14 baseband processor chip because they would have to forego these inducements.

15 133. Continental is informed and believes, and thereupon alleges, that one
16 reason, among others, that other Avanci Members have agreed to offer such
17 inducements is that, in return for other considerations, Qualcomm previously
18 obtained long term component-level licenses, still in effect, from many Avanci
19 Members—including those who are major SEP holders—that grant exhaustive (*i.e.*,
20 pass-through) rights for the use of its baseband processors, or cap royalties those
21 SEP holders can collect from potential licensees. Because such rights, including
22 exhaustive licenses, would not be available to any other baseband processor
23 supplier, competing baseband processor suppliers would face the stigma that their
24 chips are inferior because competing chips would be sold with no exhaustive pass-
25 through rights, or other royalty capping rights. Such perceived deficiency of
26 competing chips would thus dissuade potential customers from purchasing
27 competing chipsets. Accordingly, these exclusionary agreements or understandings
28 threaten to unreasonably restrain competition in the markets for baseband processors

1 by reducing rival baseband processor suppliers' sales and margins, and thus
2 hindering and reducing their ability to invest and innovate in better and new
3 functionalities to compete.

4 134. The geographic scope of the relevant technology markets, the market
5 for the licensing of 2G, 3G, and 4G cellular SEPs, and the baseband processor
6 markets alleged herein is worldwide. The 2G, 3G, and 4G standards at issue have
7 been adopted globally and are subject to common FRAND obligations governing all
8 SEPs incorporated into those standards, irrespective of the region or country in
9 which a particular patent incorporated into a standard may have been issued. In
10 addition, SEP licenses are typically granted on a worldwide basis in light of the
11 global scope of the standards at issue. For example, Avanci does not grant licenses
12 by region or country, but instead purports to license "all the essential patents owned
13 by the licensors who have joined our marketplace" which assertedly "covers the
14 entire essential 2G, 3G and 4G patent portfolio these innovators own today as well
15 as any such patents they develop or acquire during the term of your license."
16 Finally, there are no material geographic barriers to competition for baseband
17 processor sales.

18 135. Defendants' anticompetitive conduct in the markets alleged above have
19 injured, and/or threaten to injure TCU suppliers, including Continental. Continental
20 and other TCU suppliers directly face the burden of Defendants' excessive royalty
21 demands from car OEMs in the form of indemnity obligations that are
22 disproportionate to the prices and margins of TCUs. Such indemnity obligations
23 often exceed the available margins on TCUs, putting Continental and other TCU
24 suppliers at risk of having to exit the market, or reducing investment and innovation
25 in new and better functionalities to the detriment of competition and consumers.
26 Indeed, the TCU market as a whole faces the risk of general stagnation in
27 investment and innovation if TCU suppliers must bear the brunt of Defendants'
28 excessive and non-FRAND royalty demands. These collusive agreements also

1 unreasonably lead to the exclusion of other baseband processor suppliers and
2 ultimately to a key Avanci Member's further and continued dominance in the
3 markets for baseband processors. Faced essentially with a monopoly (sole-source)
4 supplier of baseband processors, Continental and other TCU suppliers would be
5 subjected to higher costs as such Avanci Member would have little incentive to offer
6 competitive prices.

7 **VII. Continental's Attempts to Obtain a License from Defendants**

8 136. Continental's own attempts to obtain licenses to the alleged SEPs
9 owned or controlled by Defendants confirms the above-described anticompetitive
10 and unlawful agreements.

11 137. Upon information and belief, Defendants first began targeting certain
12 Continental customers (automobile OEMs) in early 2017, asserting that their
13 connected cars practice the cellular standards purportedly covered by Defendants'
14 alleged SEPs, and offering a license to the alleged SEPs. The rates offered to
15 Continental's customers are non-FRAND and in violation of Defendants'
16 obligations to the various SSOs.

17 138. Continental became aware that its customers were being targeted by
18 Defendants when informed by its customers. Understanding that the automobiles
19 sold by its customers connect to the various cellular networks through the TCUs
20 provided by Continental (the actual practice of the cellular standards occurs at the
21 level of the baseband processor), Continental knew it would be in a better position
22 than its customers to negotiate a license to the alleged cellular SEPs. Indeed, patents
23 declared as essential to cellular standards are often highly technical. Understanding
24 such patents in a way that promotes productive licensing negotiations requires
25 knowledge beyond the scope required by car OEMs, who often simply assemble
26 cars with the components or subsystems that include cellular functionality. While
27 baseband processor and/or NAD suppliers are best situated to engage in such
28 negotiations, Continental has a better understanding of the cellular technology

1 standards implemented by its products than do its car OEM customers.

2 139. Continental contacted each of the Defendants individually in an attempt
3 to negotiate a FRAND license to the alleged SEPs asserted against its customers.
4 However, all of Continental's attempts have failed, in that the Defendants have
5 failed and refused to offer a direct license on FRAND terms.

6 140. Continental first contacted defendant Avanci on or about early 2018,
7 seeking a license to the alleged SEPs for which it acts as licensing agent. However,
8 at every turn, Avanci refused Continental's simple requests customary to any
9 FRAND licensing negotiation. For example, from the outset, Continental requested
10 claim charts detailing how the alleged SEPs practice the relevant standards and/or
11 how Continental's products practice the alleged SEPs. Avanci continually rebuffed
12 these requests, stating that it does not engage in technical discussions regarding the
13 patents it is authorized to license. Rather, Avanci directed Continental to contact the
14 owners of the alleged SEPs (*i.e.*, the Avanci Members) if Continental wished to
15 engage in technical negotiations. However, as described in further detail below,
16 Continental's attempt to open lines of communication with the Avanci Members
17 was also fruitless.

18 141. In addition to requesting claim charts, Continental also requested
19 Avanci's terms for a license to the alleged SEPs under its control. Avanci refused to
20 provide terms for a license to Continental. According to Avanci, it is only
21 authorized to license the alleged SEPs under its control to the automotive OEMs, *not*
22 to Tier 1 suppliers such as Continental. Further, Avanci would only seek
23 authorization from the Avanci Members to enter into a license with Continental (a
24 prerequisite to providing Continental terms of a license) if, prior to doing so,
25 Continental agreed to be bound by the royalty rates posted on Avanci's website.
26 Continental cannot be forced to agree to the clearly non-FRAND royalty rates
27 published by Avanci as a prerequisite to negotiations of other terms. Instead,
28 Continental has continually informed Avanci that it is a willing licensee, and willing

1 to engage in good faith negotiations for a license to the alleged SEPs under Avanci’s
2 control on FRAND terms. However, Avanci has refused to come off of its
3 unreasonable demands in violation of its FRAND obligations.

4 142. Continental also contacted defendant Nokia about an individual license
5 to its portfolio of alleged cellular SEPs. At various times, Continental and its
6 affiliates have sought a direct license from Nokia, without regard to the ultimate end
7 use of the product (*e.g.*, whether it will be sold directly to an OEM in the automotive
8 industry), or the identity of any end user. However, Nokia has failed and refused to
9 provide Continental with a direct license, whereby Continental itself would be fully
10 licensed to Nokia’s SEPs. In addition, the royalty rates demanded by Nokia are not
11 FRAND, and are grossly disproportionate to the value of Nokia’s purported
12 essential technologies to the actual components—*i.e.*, baseband processors—that
13 directly implement the cellular standards.

14 143. On or about January 11, 2019, Continental also contacted defendant
15 Conversant about obtaining an individual license to its portfolio of alleged cellular
16 SEPs. When Conversant responded, it stated that it was “offering a FRAND license
17 to its SEP portfolio to manufacturers of vehicles with cellular functionality,” and
18 only expressed a willingness to “make the same offer” to Continental that
19 Conversant had made to one of Continental’s OEM customers, at the same rate
20 offered to that OEM customer. Conversant did not offer Continental a license for all
21 standard-compliant devices sold by Continental, despite Continental’s follow-up
22 request for just such a license. In the meantime, Conversant continues to assert its
23 patents against Continental’s OEM customers, all while demanding non-FRAND
24 rates from them.

25 144. Continental also contacted defendant PanOptis about an individual
26 license to its portfolio of alleged cellular SEPs. However, much like the other
27 Defendants, PanOptis has refused to provide an offer for such a license to
28 Continental.

1 145. On or about June 3, 2019, Continental became aware that defendant
2 Sharp filed a lawsuit against one of Continental’s automotive OEM customers in
3 Germany alleging patent infringement in connection with standardized cellular
4 devices provided by Continental. On information and belief, prior to filing its
5 complaint defendant Sharp never contacted Continental’s OEM customer or
6 Continental regarding a direct license to Sharp’s alleged SEPs. Rather, Sharp
7 threatened Continental’s OEM customer that the only way to resolve the lawsuit is
8 to take a license from Avanci. Continental regards Sharp’s conduct as a refusal to
9 directly license Continental, as well as a refusal to individually license its alleged
10 SEPs separate from Avanci. In a letter sent to Sharp shortly before the filing of this
11 First Amended Complaint, Continental indicated that it is willing to negotiate a
12 direct license to any applicable SEPs and asked Sharp to send Continental an offer
13 for a license on FRAND terms.

14 146. Additionally, upon information and belief, Non-Party Licensor
15 Ericsson has indicated that it has a policy of licensing its alleged cellular SEPs only
16 at the end-user device level—here, the automotive OEM. For example, Christina
17 Petersson, Ericsson’s Chief IP Officer, recently publicly testified in a government
18 trial that Ericsson licenses only to companies that make “a fully compliant product
19 that can be used by the user.” (*FTC v. Qualcomm* Trial testimony, Jan. 25, 2019,
20 21:20-22:6.) In the *FTC* case, the relevant companies that Ericsson offers to license
21 were handset manufacturers, such as Samsung or Huawei. Here, such companies
22 would be the car OEMs, such as BMW. Particularly, for Ericsson’s cellular SEP
23 portfolio, it “would be licensing to the company putting its name on the fully
24 compliant equipment and selling that on the market,” which Ms. Petersson identified
25 as the OEMs. (*FTC v. Qualcomm* Trial testimony, Jan. 25, 2019, 25:5-14.)

26 147. Qualcomm, another Avanci Member, also has publicly indicated that it
27 does not license component suppliers, such as suppliers of baseband processors that
28 directly implement the cellular standards at issue even though Qualcomm requires a

1 cross-license from its licensees covering the manufacture, sale and use of its own
2 baseband processors and components.

3 148. Meanwhile, as Continental remains unable to obtain a FRAND license
4 from Defendants, Avanci and the Avanci Members' (including Defendants)
5 continue to put pressure on Continental's customers (the automotive OEMs) to
6 accept a license to the alleged cellular SEPs on non-FRAND terms, often impliedly
7 or explicitly threatening litigation and the possibility of an injunction.

8 149. Based on the above, Continental is informed and believes, and
9 thereupon alleges, that Avanci and Avanci Members have collusively agreed only to
10 directly license their alleged SEPs at the automotive OEM level (effectively
11 agreeing to a boycott of all other implementers in the supply chain) in direct
12 contravention of their commitments to make licenses available to *all* users of the
13 standards. This collusive agreement is designed to subvert the FRAND promises
14 each Avanci Member made to obtain its market power in the relevant market for its
15 standardized technology to the exclusion of alternatives, which ultimately drives up
16 the cost of licensing 2G, 3G, and 4G cellular SEPs to companies like Continental
17 which implement the standards. Defendants know they could not collect the same
18 level of royalties from Tier 1 suppliers like Continental, Tier 2 suppliers, or
19 baseband processor suppliers because the demanded rates are disproportionately
20 high as compared to product prices and profit margins of suppliers at these levels.

21 150. Given this dynamic and the above-stated facts, individual licenses are
22 not practically available to Continental, and any further licensing requests would be
23 futile, in part because individual licensing of Continental and other suppliers would
24 result in the exhaustion of Avanci and the Avanci Members' patent rights against
25 automobile OEMs, which would up-end Defendants' collusive licensing model.
26 Defendants' licensing tactics demonstrate that Defendants are collaborating in an
27 anticompetitive fashion in an attempt to extract non-FRAND royalty rates. In light
28 of Defendants' continued unfair, discriminatory, and unreasonable conduct,

1 Continental has no choice but to bring this action in order to confirm its right to a
2 license, and seek a judicial determination of the FRAND terms and conditions for
3 such a license.

4 **FIRST CAUSE OF ACTION**

5 **Breach of Contract**

6 **(Against All Defendants)**

7 151. Continental re-alleges and incorporates by reference the allegations set
8 forth in the foregoing paragraphs.

9 152. Defendants entered into, or are bound by, contractual commitments
10 they made to the relevant SSOs, such as ETSI, TIA, and/or ATIS, and their
11 respective members, participants, and implementers relating to the 2G, 3G, and 4G
12 standards. To comply with the IPR Policies of the relevant SSOs, Defendants either
13 made or are encumbered by a binding commitment to those SSOs, their members,
14 and third-party implementers to grant irrevocable licenses to any such user of
15 cellular standards purportedly covered by Defendants' alleged SEPs on FRAND
16 terms and conditions.

17 153. The declarations made pursuant to such IPR Policies created an express
18 and/or implied contract with those SSOs and their members, including an agreement
19 that Defendants would license those patents on FRAND terms and conditions. The
20 IPR Policies of ETSI, TIA, and ATIS, among other relevant SSOs, do not limit the
21 right to obtain a license on FRAND terms and conditions to their members; third
22 parties that are not members also have the right to be granted licenses under those
23 patents on FRAND terms and conditions. Each and every party with products that
24 implement the 2G, 3G, and 4G standards promulgated by such SSOs is an intended
25 third-party beneficiary of Defendants' contractual commitments, including
26 Continental, its suppliers, and its customers.

27 154. Despite Continental's good faith efforts to negotiate a license to
28 Defendants alleged SEPs, Defendants are refusing to license Continental, opting

1 instead to pursue licenses solely with automotive OEMs.

2 155. Therefore, Defendants have breached their obligations to relevant SSOs
3 such as ETSI, TIA, and/or ATIS by refusing to license to all users of cellular
4 standards allegedly covered by Defendants' declared patents, namely Continental.

5 156. Moreover, Defendants have also failed and refused to offer a license to
6 their alleged SEPs on FRAND terms and conditions. This constitutes an additional
7 breach of Defendants' FRAND obligations, of which Continental is an intended
8 third-party beneficiary.

9 157. As a result of Defendants' contractual breaches, Continental has been
10 injured in its business or property and is threatened by imminent loss of profits, loss
11 of customers and potential customers, the imposition of non-FRAND terms and
12 conditions (including via Continental's contractual indemnity obligations to its
13 OEM customers, should Defendants succeed in procuring a non-FRAND license
14 from those OEM customers), and loss of goodwill and product image.

15 158. Continental has suffered and will continue to suffer irreparable injury
16 by reason of the acts, practices, and conduct of Defendants alleged above until and
17 unless the Court enjoins such acts, practices, and conduct. Namely, Continental
18 requests (1) that this Court order Defendants to offer a license on FRAND terms and
19 conditions to Continental, and (2) an adjudication of the FRAND terms and
20 conditions for such a license.

21 **SECOND CAUSE OF ACTION**

22 **Promissory Estoppel**

23 **(Against All Defendants)**

24 159. Continental re-alleges and incorporates by reference the allegations set
25 forth in the foregoing paragraphs.

26 160. Defendants made a clear and definite promise to potential users of the
27 2G, 3G, and 4G standards through their commitments to relevant SSOs, including
28 ETSI, TIA, and/or ATIS, and also their public statements, that they had granted, or

1 would grant, licenses to any essential patents on FRAND terms and conditions.

2 161. The intended purpose of Defendants' promises was to induce reliance
3 upon these promises so that companies like Continental would invest substantial
4 resources to design, develop, and produce products compatible with the relevant
5 standards. Defendants knew or should have reasonably expected to know that they
6 would induce reliance on these promises by companies such as Continental.

7 162. Continental developed and marketed its products and services in
8 reliance on Defendants' promises, including making its products and services
9 compliant with cellular standards adopted by the relevant SSOs, including the 2G,
10 3G, and 4G standards, in various Continental product offerings.

11 163. Defendants are estopped from reneging on these promises under the
12 doctrine of promissory estoppel.

13 164. Continental has been harmed as a result of its reasonable reliance on
14 Defendants' promises and is threatened by the imminent loss of profits, loss of
15 customers and potential customers, imposition of non-FRAND terms and
16 conditions, and loss of goodwill and product image.

17 165. Continental has suffered and will continue to suffer irreparable injury
18 by reason of the acts and conduct of Defendants alleged above until and unless the
19 court enjoins such acts, practices, and conduct.

20 166. Moreover, Defendants' breach of their FRAND obligations further
21 constitutes waiver and/or estoppel of Defendants' rights to enforce any declared
22 essential patents against any entity allegedly practicing the standard.

23 **THIRD CAUSE OF ACTION**

24 **Declaratory Judgment**

25 **(Against All Defendants)**

26 167. Continental re-alleges and incorporates by reference the allegations set
27 forth in the foregoing paragraphs.

28 168. Defendants are contractually obligated to license their 2G, 3G, and 4G

1 alleged SEPs on FRAND terms and conditions. As a result of the acts described in
2 the foregoing paragraphs, there exists a definite and concrete, real and substantial,
3 justiciable controversy between Continental and Defendants regarding (1) whether
4 Continental and other suppliers in the automotive supply chain are entitled to a
5 direct license to Defendants' 2G, 3G, and 4G SEPs on FRAND terms and conditions
6 consistent with Defendants' irrevocable commitments in their obligations,
7 membership, and or declarations with relevant SSOs, including ETSI, TIA, and/or
8 ATIS, and (2) what constitutes FRAND terms and conditions for a license to
9 Defendants' 2G, 3G, and 4G SEPs. This dispute is of sufficient immediacy and
10 reality to warrant the issuance of a declaratory judgment.

11 169. Continental is entitled to a declaratory judgment with respect to (1)
12 Continental and other suppliers' entitlement to a direct license to Defendants' 2G,
13 3G, and 4G SEPs on FRAND terms and conditions; (2) a determination that
14 Defendants have not offered Continental a direct license to their alleged 2G, 3G, and
15 4G SEPs on FRAND terms and conditions; (3) a determination of what constitutes
16 FRAND terms and conditions for a license to Defendants' 2G, 3G, and 4G SEPs,
17 with those terms and conditions being imposed on the parties; and (4) a
18 determination that the FRAND terms and conditions must be consistent with well-
19 established apportionment principles under federal patent law (*i.e.*, the smallest
20 salable patent practicing unit rule).

21 **FOURTH CAUSE OF ACTION**

22 **Violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 – Concerted Action**
23 **Unreasonably Restraining Trade**
24 **(Against All Defendants)**

25 170. Continental re-alleges and incorporates by reference the allegations set
26 forth in the foregoing paragraphs, as though fully set forth herein.

27 171. Continental is informed and believes, and on that basis alleges, that
28 there exists a contract, combination, or conspiracy between or among Defendants

1 and their co-conspirators. As alleged herein, such contract, combination or
2 conspiracy includes, among other anticompetitive agreements or mutual
3 understandings, agreements or understandings to (a) collectively boycott
4 intermediate suppliers of components and subsystems within the automotive
5 chain—including suppliers of TCUs such as Continental, NADs, and the baseband
6 processors that directly implement the standards at issue—by refusing to directly
7 license them, let alone on FRAND terms and conditions, as all Defendants are
8 required to do; (b) fix and otherwise collectively set a minimum floor for basic SEP
9 licensing terms; (c) steer potential licensees to Avanci by refusing to offer individual
10 fully exhaustive direct FRAND licenses to suppliers in the automotive supply chain
11 in order to preserve Avanci’s ability to extract supra-competitive prices at the OEM
12 level; (d) combine (*i.e.*, pool) their patents for collective licensing on non-FRAND
13 terms by Avanci as a mechanism to enhance and maintain their ability to exploit the
14 market power each Defendant Licensor gained from standardization by exerting
15 additional bargaining power as a collective; (e) illegally tie the licensing of their
16 alleged SEPs to potential licensees taking licenses to their collective non-essential
17 and thus unwanted technologies, and packing the purported collective license with
18 non-SEPs in order to inflate the number of patents for collective licensing to justify
19 their non-FRAND royalties; (f) bundle alleged SEPs and non-SEPs for a joint
20 license resulting in the collective price fixing of non-essential and competing
21 technologies; and (g) fix the minimum price of licensing their alleged SEPs through
22 Avanci by collectively refusing to discount Avanci’s stated royalty for the value of
23 any individual or existing licenses, thus further raising the cost of implementing the
24 standards through double dipping in violation of exhaustion rules.

25 172. Continental is informed and believes, and on that basis alleges, that the
26 contract, combination, or conspiracy between or among Defendants and their co-
27 conspirators, as alleged herein, has and will unreasonably restrain and/or eliminate
28 trade in violation of Section 1 of the Sherman Act in multiple markets as alleged in

1 Section VI by, among other things, (a) excluding alternative technologies that
2 otherwise would have been included in the relevant technology markets had
3 Defendants, their co-conspirators, and predecessors-in-interest been transparent
4 about not honoring their relevant FRAND commitments; (b) raising the costs of
5 implementing standardized technologies and prices to consumers; (c) reducing or
6 eliminating investments by the suppliers in the automotive supply chain, including
7 by TCU suppliers, who directly bear the cost of Defendants' supra-FRAND
8 royalties in the form of disproportional indemnity costs, which would leave little
9 to negative margins for investment in new and better TCU functionalities; (d)
10 reducing or eliminating competition in the baseband processor markets within the
11 automotive supply chain by dissuading OEMs from purchasing TCUs and NADs
12 that use baseband processors that compete with those supplied by a key Avanci
13 Member; and (e) eliminating or reducing competition in the licensing of non-
14 essential and competing technologies included in the "platform" for collective
15 licensing.

16 173. Continental is informed and believes, and on that basis alleges, that
17 Defendants are engaged in interstate commerce in the United States, and the
18 activities alleged herein involve products in the flow of interstate commerce and will
19 substantially impact interstate commerce as the alleged licensing activities are
20 directed to car OEMs throughout the United States and directly affect the products
21 sold throughout the United States, the cellular standards are implemented
22 throughout the United States, and SSOs such as ATIS and TIA adopt such standards
23 for implementation throughout the United States with IPR Policies governing
24 FRAND licensing of SEPs they adopt into standards for the entire United States.

25 174. Continental is informed and believes, and on that basis alleges, that the
26 unreasonable restraints and elimination of trade, as alleged herein, have resulted in
27 substantial harm to competition in both the upstream technology markets and the
28 downstream markets that implement and practice the standards, as alleged in Section

1 VI.

2 175. Continental is informed and believes, and on that basis alleges, that
3 Defendants and their co-conspirators have used the cover of Avanci as a patent pool
4 or “licensing platform” to collusively engage in all of the anticompetitive conduct
5 alleged herein, including in Section VI, that unreasonably restrains trade in violation
6 of Section 1 of the Sherman Act.

7 176. Continental is informed and believes, and on that basis alleges, that
8 there is no procompetitive justification for the anticompetitive agreements and
9 conduct alleged herein, including Defendants’ refusal to offer Continental a direct
10 FRAND license in breach of their affirmative and voluntary commitments to do so.
11 To the extent Defendants assert that any procompetitive justifications exist, such
12 purported justifications are outweighed by the anticompetitive effects in markets
13 alleged in Section VI.

14 177. As a result of the collusive conduct alleged herein, including the
15 collective refusal to directly license Continental and its NAD and baseband
16 processor suppliers, Continental has suffered and will continue to suffer injury to its
17 business and property and will suffer substantial and irreparable harm if such
18 conduct remains unredressed. In particular, because Continental cannot obtain the
19 necessary FRAND licenses to the alleged SEPs, its ability to secure customers is
20 threatened because its customers typically demand that Continental indemnify them
21 or discount its prices to account for Defendants’ exorbitant royalties. Such
22 indemnity costs exceed Continental’s margins on its products that implement the
23 standards primarily through the use of a baseband processor. Continental, as with
24 other TCU suppliers, is also faced with the prospect of a sole supplier of baseband
25 processors for its TCUs as a result of Defendants’ and their co-conspirators’
26 agreements to offer royalty rebates, discounts or other incentives for the use of a key
27 Avanci Member’s chipsets, which would effectively eliminate Continental’s ability
28 to switch to competing chips to reduce costs.

1 178. Continental thus seeks an order declaring as unlawful the collusive
2 agreements, alleged herein, and to enjoin and otherwise remedy such conduct,
3 including ordering Defendants to offer a FRAND license to Continental and other
4 suppliers in the automotive supply chain, and setting the terms of a FRAND license,
5 including a FRAND rate, for their asserted SEPs being collectively licensed by
6 Avanci.

7 **FIFTH CAUSE OF ACTION**

8 **Violation of Section 2 of the Sherman Act, 15 U.S.C. § 2 – Unlawful**
9 **Monopolization**

10 **(Against Defendant Licensors)**

11 179. Continental re-alleges and incorporates by reference the allegations set
12 forth in the foregoing paragraphs, as though fully set forth herein.

13 180. Continental is informed and believes, and on that basis alleges, that the
14 relevant technology markets, as defined in Section VI above, are valid antitrust
15 markets.

16 181. Continental is informed and believes, and on that basis alleges, that
17 Defendant Licensors have willfully acquired and maintained monopoly power in the
18 relevant technology markets, as described in Section VI above.

19 182. Continental is informed and believes, and on that basis alleges, that
20 Defendant Licensors intentionally and falsely represented to the relevant SSOs, such
21 as ETSI, ATIS and/or TIA that if elements of their proprietary technology were
22 included in the cellular standards adopted into standards, they would license such
23 patents to any applicant desiring a license to utilize the standards to produce
24 standard-complaint products on FRAND terms and conditions. To the extent,
25 Defendant Licensors are successors-in-interest to an original SEP holder that made
26 such FRAND promises, they obtained their rights subject to such commitments and
27 either knew or should have known of the nature of the FRAND commitments that
28 encumbered the disclosed asserted SEPs.

1 183. Continental is informed and believes, and on that basis alleges, that the
2 relevant SSOs relied on such FRAND licensing promises in adopting the asserted
3 SEPs into standards, and that, absent such affirmative promises, the SSOs otherwise
4 would not have agreed to adopt a cellular standard that would have given Defendant
5 Licensors the power to effectively block companies from practicing the standards.
6 Indeed, the anticompetitive effects of Defendant Licensors' breaches of their
7 FRAND promises are the same whether Defendant Licensors intentionally deceived
8 the SSOs at the time they made FRAND promises, or later opportunistically
9 breached their FRAND promises once their technologies became locked into the
10 standards. Either way, Defendant Licensors' technologies became locked into the
11 standards because their FRAND licensing representations directly caused SSO
12 participants to, at a minimum, forego the process by which they were required to
13 evaluate and select alternatives to any essential technology known to be unavailable
14 for FRAND licensing, or to abandon those portions of the standards for which no
15 such alternative was available.

16 184. After their technologies were locked into the standards, giving
17 Defendant Licensors monopoly power in their standardized technologies, Defendant
18 Licensors have refused to negotiate in good faith to license their asserted SEPs on
19 FRAND terms, including by refusing to directly license Continental and its suppliers
20 within the automotive supply chain, so that they could extract higher royalties from
21 car OEMs.

22 185. Continental is informed and believes, and on that basis alleges, that
23 there is no procompetitive justification for Defendant Licensors' exclusionary
24 conduct as alleged herein, including their refusal to offer Continental a FRAND
25 license in breach of their affirmative and voluntary commitments to do so. Even if
26 any procompetitive justification is asserted to exist, it is far outweighed by the
27 anticompetitive effects asserted herein, especially in light of Defendant Licensors'
28 voluntary FRAND licensing commitments.

1 186. As a result of Defendant Licensors' anticompetitive breaches of their
2 FRAND obligations, including their refusal to directly license Continental and its
3 NAD and baseband processor suppliers, Continental has suffered and will continue
4 to suffer injury to its business and property and will suffer substantial and
5 irreparable harm if the anticompetitive conduct alleged herein remains unredressed.

6 187. Continental thus seeks an order declaring Defendant Licensors'
7 exclusionary conduct to be unlawful, and to enjoin and otherwise remedy such
8 conduct, including ordering Defendant Licensors to offer a FRAND license to
9 Continental and other suppliers in the automotive supply chain, and setting the terms
10 and conditions of a FRAND license, including a FRAND rate, for their asserted
11 SEPs.

12 **SIXTH CAUSE OF ACTION**

13 **Violation of Section 2 of the Sherman Act, 15 U.S.C. § 2 – Conspiracy to**
14 **Monopolize**
15 **(Against all Defendants)**

16 188. Continental re-alleges and incorporates by reference the allegations set
17 forth in the foregoing paragraphs, as though fully set forth herein.

18 189. Continental is informed and believes, and on that basis alleges, that the
19 relevant markets, as defined in Section VI above, are valid antitrust markets.

20 190. Continental is informed and believes, and on that basis alleges, that
21 Defendant Licensors and their unnamed co-conspirators each willfully acquired and
22 then maintained monopoly power in the relevant technology markets as a result of
23 the standardization of their proprietary technologies, as described in Section VI
24 above.

25 191. Although each Defendant Licensor and unnamed co-conspirator
26 obtained monopoly power in its own standardized technology, each licensor's
27 ability to license those SEPs nonetheless was subject to competitive discipline by
28 licensing terms offered by other large SEP holders, as described in Section VI,

1 above. Upon information and belief, to avoid competition in setting the basic terms
2 and conditions of a FRAND license, including the levels of the supply chain to be
3 licensed, Defendants and their co-conspirators colluded to set up Avanci as a front
4 through which they would jointly license their alleged SEPs on a single set of
5 common non-FRAND terms only to car OEMs, thus establishing a floor for cellular
6 SEP licensing of the automotive industry.

7 192. Continental is informed and believes, and on that basis alleges, that
8 Defendants entered into a multilateral agreement between and among themselves
9 and with their co-conspirators, or otherwise reached mutual understandings to use
10 Avanci as a tool to exert additional pressure and bargaining power in licensing
11 negotiations with users of the standards, particularly due to unavailability of
12 individual FRAND licenses as agreed by and among themselves. Accordingly, the
13 multilateral agreement between/among Defendants and their co-conspirators, to pool
14 or otherwise combine and collectively license their patents through Avanci on non-
15 FRAND terms was a mechanism to maintain and further enhance their ability to
16 exploit the monopoly power that each co-conspirator SEP holder initially obtained
17 from standardization of its proprietary technologies as a result of its FRAND
18 representations, as alleged herein.

19 193. Continental is informed and believes, and on that basis alleges, that
20 Defendants and their co-conspirators thus agreed for Avanci to carry out their
21 collusive scheme by, among other things, offering a joint license at supra-FRAND
22 royalties only to car OEMs, which are overvalued in comparison to the technical
23 contributions of the patents being licensed.

24 194. Continental is informed and believes, and on that basis alleges, that
25 Defendants' and their co-conspirators' exclusionary conduct harms competition in
26 multiple levels of the automotive supply chain, including by threatening the
27 suppliers' ability to continue to invest in innovative products to the detriment of
28 consumers.

1 195. As a result of the conspiratorial and anticompetitive breaches of
2 FRAND obligations and other anticompetitive agreements alleged herein, including
3 in Section VI above, Continental has suffered and will continue to suffer injury to its
4 business and property and will suffer substantial and irreparable harm if such
5 conduct remains unredressed.

6 196. Continental is informed and believes, and on that basis alleges, that
7 there is no procompetitive justification for the exclusionary conduct as alleged
8 herein, including Defendants' refusal to offer Continental a FRAND license in
9 breach of their affirmative and voluntary commitments to do so. Even if any
10 procompetitive justification is asserted to exist, it is far outweighed by the
11 anticompetitive effects asserted herein, especially in light of Defendants' and their
12 co-conspirators' voluntary FRAND licensing commitments.

13 197. Continental thus seeks an order declaring the exclusionary and
14 collusive agreements alleged herein to be unlawful, and to enjoin and otherwise
15 remedy such illegal conduct, including ordering Defendants to offer a FRAND
16 license to Continental and other suppliers in the automotive supply chain, and
17 setting the terms of a FRAND license, including a FRAND rate, for their asserted
18 SEPs.

19 **SEVENTH CAUSE OF ACTION**

20 **Violation of California Unfair Competition Law – Cal. Bus. & Prof. Code**

21 **Section 17200 et seq.**

22 **(Against All Defendants)**

23 198. Continental re-alleges and incorporates by reference the allegations set
24 forth in the foregoing paragraphs, as though fully set forth herein.

25 199. By the acts alleged herein, Defendants have engaged in unfair
26 competition within the meaning of the California Business and Professions Code
27 Section 17200 et seq. (the "UCL"), in that the conduct alleged herein, and each of
28 them, constitute unlawful, unfair or fraudulent business acts or practices as

1 proscribed by the UCL.

2 200. The anticompetitive business acts or practices that are alleged herein
3 and above violate, *inter alia*, Sections 1 and 2 of the Sherman Act, Section 5 of the
4 Federal Trade Commission Act and common law, and as such also constitute
5 unlawful conduct within the meaning of the UCL. Such unlawful conduct includes,
6 among others, (a) unilateral as well as concerted refusals to license Continental and
7 other component suppliers within the automotive supply chain in an effort to extract
8 excessive, non-FRAND royalties from car OEMs through Avanci at supra-
9 competitive levels in violation of Defendants' express and voluntary FRAND
10 commitments; (b) agreements to fix and otherwise set a floor for cellular SEP
11 license terms—including supra-FRAND royalties and other discriminatory terms—
12 through Avanci in an effort to eliminate competition in establishing basic FRAND
13 terms and conditions for SEP licensing; (c) Defendant Licensors' breaches of their
14 express and voluntary FRAND contracts with SSO's as alleged herein; (d) Avanci's
15 knowing aiding and abetting of Defendant Licensors' breaches of their FRAND
16 contracts with SSOs; and (e) Defendant Licensors' illegal agreements and
17 understandings with Avanci and other co-conspirators to combine their asserted
18 SEPs for non-FRAND joint licensing by Avanci in an effort to further enhance and
19 maintain the monopoly power each Defendant Licensor obtained from
20 standardization of its proprietary technology.

21 201. Defendants' business acts or practices complained of herein are unfair
22 within the meaning of the UCL. Such acts (and each of them as alleged herein) at a
23 minimum threaten an incipient violation of an antitrust law, or violate the policy or
24 spirit of one of those laws such that their effects are comparable to or the same as a
25 violation of the law, or otherwise significantly threaten or harm competition.
26 Defendants' complained-of conduct is immoral, unethical, oppressive, unscrupulous
27 or substantially injurious to TCU, NAD and baseband processors manufacturers,
28 including Continental, and to consumers who ultimately bear higher costs resulting

1 from Defendants' anticompetitive and unfair business acts or practices alleged
2 herein.

3 202. Defendant Licensors' alleged acts or practices are also deceptive within
4 the meaning of the UCL. When Defendant Licensors made their express FRAND
5 commitments to SSOs, they omitted disclosing that they may, in their own
6 discretion, withhold licenses from certain implementers, including TCU, NAD and
7 baseband processor suppliers whose products utilize the standards in order to extract
8 supra-FRAND royalties from more downstream implementers, like car OEMs.
9 Standards participants and implementers alike had no reason to believe that
10 Defendant Licensors would withhold licenses to their FRAND-encumbered SEPs so
11 as to disadvantage certain implementers within a given supply chain when they
12 agreed to adopt Defendant Licensors' proprietary technologies into standards. Such
13 omissions were material to the standardization of their technologies by the relevant
14 SSOs because the omissions, at a minimum, displaced the process within the SSOs
15 that required those SSOs to revise or abandon portions of their standards that relied
16 on proprietary technology known to be unavailable for FRAND licensing.
17 Accordingly, each SSO adopted Defendant Licensors' asserted SEPs into standards
18 in reliance upon their express and unqualified FRAND commitments, reasonably
19 believing that such essential technology would be available for FRAND licensing to
20 any implementer who seeks to utilize the standards. Avanci, as Defendant
21 Licensors' agent for the licensing of their SEPs, knew of these omissions and later
22 aided and abetted the breaches of FRAND commitments alleged herein. Indeed,
23 Avanci's Chief Executive Officer, Kasim Alfalahi, was previously a licensing
24 executive at Ericsson, one of Avanci's initial members.

25 203. As a direct, proximate, and foreseeable result of Defendants' wrongful
26 conduct in violation of the UCL, alleged above, Continental has suffered—and
27 continues to suffer—harm, including lost TCU sales, an inability to effectively
28 compete in the relevant TCU market, and higher costs and reduced profitability, as

1 accordance with Defendants' obligations to the relevant SSOs, including ETSI, TIA,
2 and/or ATIS, must be consistent with apportionment principles under federal patent
3 law, *i.e.*, the smallest salable patent practicing unit rule;

4 G. Adjudge and decree that Defendants have not offered a license to their
5 alleged 2G, 3G, and 4G SEPs to Continental on FRAND terms and conditions;

6 H. Enjoin defendants from demanding excessive royalties from
7 Continental and its customers that are not consistent with Defendants' FRAND
8 obligations to the relevant SSOs, including ETSI, TIA, and/or ATIS;

9 I. Enjoin Defendants from enforcing their alleged 2G, 3G, and/or 4G
10 SEPs against Continental and its customers via patent infringement lawsuits or other
11 proceedings in other jurisdictions, while Continental remains a willing licensee and
12 seeks an adjudication of the FRAND terms and conditions from this Court;

13 J. Adjudge and decree that Defendants have violated Section 1 of the
14 Sherman Act and enjoin Defendants from further violations of that statute;

15 K. Adjudge and decree that Defendants have violated Section 2 of the
16 Sherman Act and enjoin Defendants from further violations of that statute;

17 L. Adjudge and decree that Defendants have violated the California
18 Business and Professions Code Section 17200 et seq., and enjoin Defendants from
19 further violations of the statute;

20 M. Enter judgment awarding Continental its expenses, costs, and
21 attorneys' fees under applicable laws;

22 N. Award Continental pre-judgment and post-judgment interest to the full
23 extent allowed under the law, as well as its costs; and

24 O. For such other and further relief as the Court deems just and proper.
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1 Dated: July 23, 2019

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SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

By /s/ Stephen S. Korniczky
STEPHEN S. KORNICZKY
MARTIN R. BADER
MATTHEW W. HOLDER
MICHAEL W. SCARBOROUGH
MONA SOLOUKI

Attorneys for Plaintiff
Continental Automotive Systems, Inc.