IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

OPTIS WIRELESS TECHNOLOGY, LLC, OPTIS CELLULAR TECHNOLOGY, LLC, UNWIRED PLANET, LLC, UNWIRED PLANET INTERNATIONAL LIMITED, AND PANOPTIS PATENT MANAGEMENT, LLC, Plaintiffs, v. APPLE INC., Defendant.	Civil Action No. 2:19-cv-66-JRG JURY TRIAL FILED UNDER SEAL

PLAINTIFFS' RULE 50(B) MOTION FOR JUDGMENT AS A MATTER OF LAW ON INFRINGEMENT OF U.S. PATENT NOS. 8,385,284 AND 9,001,774, AND WILLFUL INFRINGEMENT

TABLE OF CONTENTS

Page

I. APPLICABLE LAW 1

II. OPTIS IS ENTITLED TO JMOL OF INFRINGEMENT 1

a. Optis Is Entitled To JMOL Because Each Asserted Claim Is Essential To Mandatory Portions Of The 4G LTE Standard Implemented By Apple In The Accused Products 2

b. Optis Is Entitled To JMOL Because Each Asserted Claim Is Practiced By The Accused Products 6

i. The '774 Patent 7

1. '774 Claim 6 7

ii. The '284 Patent 10

1. '284 Claim 14 11

2. '284 Claim 27 16

III. OPTIS IS ENTITLED TO JMOL OF WILLFULNESS 16

IV. CONCLUSION 18

TABLE OF AUTHORITIES

Page(s)

Cases

Accent Packaging, Inc. v. Leggett & Platt, Inc.,
707 F. 3d 1318 (Fed. Cir. 2013) 15

Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.,
876 F.3d 1350 (Fed. Cir. 2017) 18

Ericsson, Inc. v. D-Link Sys., Inc.,
773 F.3d 1201 (Fed. Cir. 2014) 2

Global-Tech Appliances, Inc. v. SEB S.A.,
563 U.S. 754 (2011) 18

Goodner v. Hyundai Motor Co.,
650 F.3d 1034 (5th Cir. 2011) 1

Hitachi Consumer Elecs. Co. v. Top Victory Elecs. Taiwan Co.,
No. 2:10-cv-00260, 2013 WL 5273326 (E.D. Tex. Sep. 18, 2013) 1

Hodges v. Mack Trucks, Inc.,
474 F.3d 188 (5th Cir. 2006) 1

Invitrogen Corp. Contech Lab'ys, Inc.,
429 F.3d 1052, 1080 (Fed. Cir. 2005) 4

Ironburg Inventions Ltd. v. Valve Corp.,
64 F.4th 1274 (Fed. Cir. 2023) 18

N. Cypress Med. Ctr. Operating Co., Ltd. v. Aetna Life Ins. Co.,
898 F.3d 461 (5th Cir. 2018) 1

Optis Cellular Tech., LLC v. Apple Inc.,
139 F.4th 1363 (Fed. Cir. 2025) 2, 3

Pharmacia & Upjohn Co. v. Mylan Pharms., Inc.,
170 F.3d 1373 (Fed. Cir. 1999) 4, 14

Rogers v. McDorman,
521 F.3d 381 (5th Cir. 2008) 1

Zelinski v. Brunswick Corp.,
185 F.3d 1311 (Fed. Cir. 1999) 4

Page

Rules

Rule 50(b) 1

Plaintiffs move pursuant to Rule 50(b) for judgment as a matter of law ("JMOL") of infringement for U.S. Patent Nos. 8,385,284 (Ex. 1, PX 3) ("the '284 Patent") and 9,001,774 (Ex. 2, PX 5) ("the '774 Patent"), and willfulness.

I. APPLICABLE LAW

JMOL is appropriate when "a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50; *Hodges v. Mack Trucks, Inc.*, 474 F.3d 188, 193 (5th Cir. 2006). "The jury's verdict must be supported by 'substantial evidence' in support of each element of the claims." *Hitachi Consumer Elecs. Co. v. Top Victory Elecs. Taiwan Co.*, No. 2:10-cv-00260, 2013 WL 5273326, at *1 (E.D. Tex. Sep. 18, 2013).

More than a mere scintilla of evidence is needed to present a question to the jury—the opposing party "must at least establish a conflict in substantial evidence on each essential element of their claim." *Goodner v. Hyundai Motor Co.*, 650 F.3d 1034, 1039 (5th Cir. 2011). "Substantial evidence is more than a scintilla, less than a preponderance, and is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *N. Cypress Med. Ctr. Operating Co., Ltd. v. Aetna Life Ins. Co.*, 898 F.3d 461, 473 (5th Cir. 2018). "Even if the evidence is more than a scintilla, some evidence may exist to support a position which is yet so overwhelmed by contrary proof as to yield to a motion for judgment as a matter of law." *Rogers v. McDorman*, 521 F.3d 381, 391 (5th Cir. 2008) (citation modified).

II. OPTIS IS ENTITLED TO JMOL OF INFRINGEMENT

Optis brought a claim for infringement of '332 Patent claims 6 and 7 ("the '332 asserted claims"), '833 Patent claim 8 ("the '833 asserted claim"), '557 Patent claim 10 ("the '557 asserted claim"), '774 Patent claim 6 ("the '774 asserted claim"), and '284 Patent claims 14 and 27 ("the '284 asserted claims") (collectively "the Asserted Claims"). The evidence required a reasonable jury to find that Apple's accused 4G LTE iPhones, iPads, and Apple Watches (the "Accused Products") infringed

the Asserted Claims. Apple's non-infringement responses did not create a material dispute, and JMOL should be granted. This motion addresses the JMOL as related to the '774 and '284 patents as well as willfulness while the concurrently filed JMOL #1 addresses issues related to '332, '833 and '557 patents.

a. Optis Is Entitled To JMOL Because Each Asserted Claim Is Essential To Mandatory Portions Of The 4G LTE Standard Implemented By Apple In The Accused Products

First, JMOL should be granted for infringement because the Asserted Claims are essential to mandatory portions of the 4G LTE standard practiced by the Accused Products. As the Federal Circuit decision on remand stated: "[t]he asserted patents are standard-essential patents ('SEPs') that cover technology essential to the Long-Term Evolution ('LTE') standard." *Optis Cellular Tech., LLC v. Apple Inc.*, 139 F.4th 1363, 1368 (Fed. Cir. 2025); *see* Optis' Motion for New Trial at 1-3, filed concurrently.

The Federal Circuit further held that "[t]he asserted patents are ***undisputably FRAND-encumbered SEPs***, [citing Dkt. 585 at 9, this Court stating that the asserted patents 'are FRAND-encumbered SEPs'], so any royalty award had to be FRAND." *Optis Cellular Tech., LLC.*, 139 F.4th at 1376 n.8 (emphasis added). Apple has asserted "Plaintiffs are undisputedly obligated to license the patents-in-suit on FRAND terms." Dkt. 549 at 1; *see also* Dkt. 778, Ex. 5 [Apple Appellate Brief] at 63 ("in this SEP case, the reasonable royalty rate must reflect FRAND, including that the rate be 'non-discriminatory.'"). A FRAND obligation only exists when a patent is essential to the LTE standard under the governing ETSI policy:

> ***Standards often incorporate patented technology, also known as SEPs.*** When a standard incorporates ***SEPs, 'compliant devices necessarily infringe' claims that 'cover technology incorporated into the standard.'*** *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1209 (Fed. Cir. 2014) (emphasis in original). As a result, companies developing standard-compliant devices must obtain licenses from the owners of such SEPs. ETSI has created an Intellectual Property Rights ("IPR") Policy designed to ensure that patentees are fairly compensated for their contributions while fostering the standard's widespread adoption. To

facilitate this balance, under the IPR policy, ***SEP owners commit to licensing their SEPs on FRAND terms***.

Optis Cellular Tech., LLC., 139 F.4th at 1369. The Federal Circuit's ruling, as well as the doctrines of judicial estoppel and the law of the case, each should have prevented Apple from challenging essentiality and hence infringement.

The evidence at trial also established that each of the Asserted Claims is essential to the 4G LTE standard. *See, e.g.*, Tr. 263:12-17 [Optis expert Mahon] ('284 and '774 Patents are standard essential):

- **'774 Patent:** Ex. 3, PX 2142.52 [TS 36.212] (incorporating the '774 invention); Tr. 316:3-21 [Mahon] (explaining how LTE adopted '774 inventions in 36.212); Tr. 312:16-18 [Mahon]; Tr. 318:2-7 [Mahon] (explaining which transmission mode from the LTE standard uses the '774 Patent); Tr. 315:15-317:11 [Mahon] ("the LTE standard adopt this design [from the '774 asserted claims]" including at TS 36.212, table 5.3.3.1.5-4); Tr. 315:24-316:2 [Mahon] (explaining that a "time delay in the time domain translates into a phase rotation and the frequency domain"); [redacted]
- **'284 Patent**: Ex. 4, PX 63 at 61 [TS 36.213] (incorporating the '284 invention); Tr. 296:17-297:7 [Mahon] (comparing Panasonic proposal relating to '284 patent with 36.213 and confirming Panasonic's proposal "was adopted into the LTE standards"); Tr. 277:4-12 [Mahon] (same); Tr. 267:16-21 [Mahon] (describing "portion of the LTE system [that] uses the '284 Patent").

Apple's assertion of non-essentiality does not withstand scrutiny:

'774 Patent: Apple's expert argued that the asserted claim is not essential because, in the LTE standard, the device "receives what's called precoding information, and it receives transport block information" and "none of these is a gain, a phase, or a time delay" that is required to be received. Tr. 962:23-963:22 [Wells]; *see also* Tr. 966:18-967:12 [Wells]. But Apple conceded that the "precoding information" as specified in the LTE standard on DCI format 2 and received by the Accused Products is decoded to obtain the gain and phase information, and nothing in the claims precludes encoding and decoding of the processing parameters provided by the base station; to the contrary, decoding of the binary bits is the *only way* a device receives information from a base station. *See* § II.b.i (*infra*).

'284 Patent: Apple's expert argued the asserted claims are not essential because "in LTE the second subset is actually bigger than the first subset." Tr. 1077:7-13 [Fuja]. But Apple does not dispute that the LTE standard adopted Panasonic's proposal, and the proposal is consistent with Table 3 of the patents. Tr. 276:20-277:12 [Mahon]. Apple's argument involving counting every row of the table as part of the "second subset" is also in direct contradiction to the patent's disclosure and the prosecution history for the '284 patent. *See* § II.b.ii (*infra*). Apple's suggestion that the jury should ignore the prosecution history because the statement was in a Response to an Office Action signed by the prosecution attorney is wrong as a matter of law. *See, e.g.*, *Pharmacia & Upjohn Co. v. Mylan Pharms., Inc.*, 170 F.3d 1373, 1377 (Fed. Cir. 1999) (affirming district court's consideration of "statements made by the attorney prosecuting the application").

Apple's conclusory expert testimony is insufficient as a matter of law. *See, e.g.*, *Zelinski v. Brunswick Corp.*, 185 F.3d 1311, 1317 (Fed. Cir. 1999) ("[a conclusory] statement fails to provide the necessary evidentiary basis to support a claim that there is a genuine issue of material fact") (*citing Phillips Petroleum Co. v. Huntsman Polymers Corp.*, 157 F.3d 866, 876, (Fed. Cir. 1998) (reasoning that conclusory expert testimony devoid of facts upon which the conclusions were reached fail to raise a genuine issue of material fact)); *Invitrogen Corp. Contech Lab'ys, Inc.*, 429 F.3d 1052, 1080 (Fed. Cir. 2005)

("A party does not manufacture more than a merely colorable dispute simply by submitting an expert declaration asserting that something is black when the moving party's expert says it is white; there must be some foundation or basis for the opinion.").

Apple failed to provide sufficient evidence upon which a reasonable jury could conclude the Asserted Claims are not standard essential.

Further, the evidence at trial established that each of the sections of the 4G LTE standard covered by the Asserted Claims is mandatory for compliance with the 4G LTE standard, and the accused Apple products practice those sections of the standard. *See, e.g.*, Tr. 937:21-23 [Apple expert Wells] ("Q. Now, just to be clear, does Apple practice, and by practice I mean use the LTE standard? A. Yes, Apple uses the LTE standard."); Tr. 296:3-4 [Mahon] ("Apple use[s] LTE"); Tr. 440:3-4 [Madisetti] ("Apple use[s] the LTE standard"); Ex. 5, PX 2052 at 5 [redacted] Tr. 417:14-418:7 [Apple 3GPP certification manager Stewart] ("it's important that we are able to meet the requirements that carriers set out and mandate to -- to sell on their network."); [redacted] *see also*:

- **'774 Patent:** Tr. 317:12-317:17 [Mahon] (Apple implements TS 36.211, 36.212, and 36.213, including inventions of '774 patent); [redacted]
- **'284 Patent**: Tr. 268:7-13 [Mahon] (portion of the standard that reads on the '284 patent is "require[d] to be able to connect to an LTE network"); [redacted]

Apple did not dispute that it implements the LTE standard, including the sections which implement the Asserted Claims. Rather, Apple argued that the "LTE standard mandates … how the messages have to be followed that are sent and received by the device, but it does not mandate what actually happens inside the device." Tr. 850:12-19 [Rodermund] ("Q. Who decides what happens inside an LTE-compliant device? A. The manufacturer of the device."); *see also* Tr. 875:13-25 [Apple engineer Josiam] ("the standard just tells us where – what – the format and when such transmissions need to occur, but it does – it may not even give us some idea like how we might want to go about engineering it. But we – the – the freedom to come up with designs such that the format – the signals we generate comply with the format is completely up to us"); Tr. 888:4-15 [Apple engineer Ramaprasad] ("3GPP specifications provides a broad guideline"). But none of Apple's witnesses disputed Dr. Mahon's testimony on the implementation details based on the source code relevant to the '774 patent, and none disputed Dr. Mahon's testimony on the implementation details based on Qualcomm source code with respect to the '284 patent.

As further addressed in detail below, none of the alleged implementation decisions in Intel chips identified by Apple diverted from the standard or the Asserted Claims. Apple's general statements about its freedom to implement the standard in its products as it chooses does not create a material dispute about infringement. No reasonable jury could find that the Asserted Claims are not essential to mandatory portions of the 4G LTE standard practiced by the Accused Products, and JMOL of infringement should be granted.

b. Optis Is Entitled To JMOL Because Each Asserted Claim Is Practiced By The Accused Products

Second, Optis established that the Accused Products practice each of the Asserted Claims through presentation of expert testimony, source code, technical implementation documents, and

admissions of Apple witnesses. This provides an independent basis upon which JMOL of infringement should be granted.

i. The '774 Patent

The '774 patent relates to a method for transmitting data over two antennas with a closed-loop feedback. In this method, a phone first reports to the base station certain information indicting parameters suitable for its local environment, and the base station then sends to the phone a processing parameter that includes at least a time delay, a phase rotation or a gain based on the information sent by the phone. The method permits the base station and the phone to communicate to each other using parameters tailored to the local operating environment.

[redacted] Prof. Mahon testified that Apple directly infringes the '774 asserted method claim by testing the infringing devices in the US in order to comply with the service providers' technical requirements, and that Apple indirectly infringes because, *inter alia*, Apple encourages its customers to use the infringing features, the Accused Products have no substantial non-infringing uses, and the Accused Products are not a staple of commerce. Tr. 266:10-15, 309:17-21, 320:20-321:3; *see also* Tr. 418:21–419:4 [Balasubramanian].

1. '774 Claim 6

The evidence at trial established that Apple's Accused Products infringe each element of '774 claim 6, and JMOL of infringement should be granted:

6. A method, comprising: **receiving a processing parameter for transmission of data on two antenna ports, the processing parameter including at least one of a time delay, a phase rotation and a gain determined based on a received uplink signal**: Optis established that the Accused Products practice this element. [redacted]

[redacted]

Apple disputed infringement as to this limitation. Tr. 963:5-14 [Wells][1]. Apple argued that while the Accused Products receives "processing parameters" and "uses these parameters so that the handset itself can derive a gain or a phase," Apple does not infringe because the Accused Products "determine[s] that gain and phase itself." Tr. 963:23-965:3 [Wells]; Tr. 964:6-965:12 [Wells] (alleging that the Accused Products perform "mathematical operations" on the received parameters and lookups in a "code book" with a "precoding matrix" to determine the gain and phase).

[redacted]

Apple argued that the parameters themselves did not contain the gain and phase information because the parameters received by the Accused Products had to be decoded using a codebook stored

[1] Apple's expert improperly claimed he confirmed his understanding of the functionality in the Accused Products with Apple's engineers, despite Apple refusing to produce its engineer for deposition in discovery and agreeing it would not rely on its engineers as to the '774 patent. Tr. 965:20-25; *see* Dkt. 843.

on the phone that contains the gain/phase rotation information. [redacted] Moreover, the claims set no limitation on the format the gain and phase information are sent from the base station to the device, including whether the information is encoded. Apple's attempt to read in limitations to the claims does not create a material dispute about infringement. Indeed, any such limitation is nonsensical: [redacted]

Apple's non-infringement response did not create a material dispute as to infringement of the '774 asserted claim.

receiving a first pilot, a second pilot, a first data symbol and a second data symbol transmitted on the two antenna ports; and: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

demodulating the first data symbol and the second data symbol based on the processing parameter, the first pilot and the second pilot.: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

No reasonable jury could find that Apple's Accused Products do not infringe the '774 asserted claim, and JMOL of infringement of the '774 Patent should be granted.

ii. The '284 Patent

The '284 patent provides a way to signal control information with reduced bandwidths without sacrificing the reliability. The patent achieves this by jointly encoding transport format and redundancy version in a single field, with the values of the signaled field grouped into two subsets, wherein the first subset—having more values than the second subset—is reserved for indicating the transport format and the second subset is reserved for indicating the redundancy version of the user data.

[redacted] Prof. Mahon testified that Apple directly infringes the '284 asserted method claims by testing the infringing devices in the US in order to comply with the service providers' technical requirements, and that Apple indirectly infringes because, *inter alia*, Apple encourages its customers to use the infringing features, the accused products have no substantial non-infringing uses, and the Accused Products are not a staple of commerce. Tr. 266:10-15, 309:17-21, 309:8-21; *see also* Tr. 418:21-419:4 [Balasubramanian].

1. '284 Claim 14

The evidence at trial established that Apple's Accused Products infringe each element of '284 claim 14, and JMOL of infringement should be granted:

14. A method for use in a mobile communication system, the method comprising the following steps performed by a mobile terminal: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

receiving a sub-frame of physical radio resources comprising a control channel signal destined to the mobile terminal: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

determining based on the received control channel signal a transport format of and a redundancy version for an initial transmission or a retransmission a protocol data unit conveying user data, and: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

transmitting the protocol data unit on at least one physical radio resource using the transport format and the redundancy version of the protocol data unit indicated in the received control

channel signal: Optis established, and Apple did not dispute, that the Accused Products practice this element. [redacted]

wherein the control channel signal received within said sub-frame comprises a control information field, in which the transport format and the redundancy version of the protocol data unit are jointly encoded: Optis established, and Apple did not dispute, that the Accused Products practice this element. *See, e.g.*, Tr. 306:21-307:5 [Mahon] (for DCI format 0 "control information contains a modulation encoding scheme" including a "jointly encoded field"); Ex. 3, PX 2142.43-44; Ex. 4, PX 63.61.

wherein the control information field consists of a number of bits representing a range of values that can be represented in the control information field, wherein a first subset of the values is reserved for indicating the transport format of the protocol data unit and a second subset of the values, different from the first subset of the values, is reserved for indicating the redundancy version for transmitting the user data, and: *See, e.g.*, Tr. 307:6-16 [Mahon] ("it shows you that that control field contains 5 bits which corresponds to a range of 32 values in the table."); Ex. 3, PX 2142.43-44; Ex. 4, PX 63.61; [redacted]

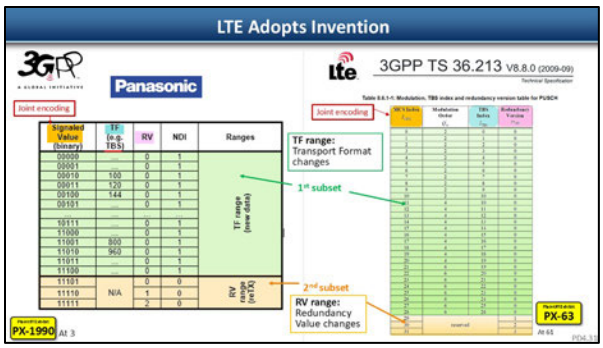
wherein the first subset of the values contains more values than the second subset of the values.: Optis established that the Accused Products practice this element. [redacted]

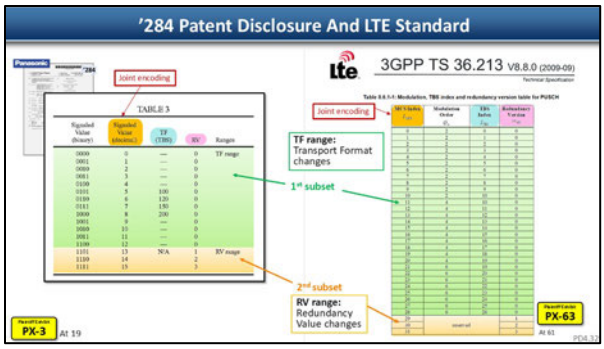
[redacted]

Apple disputed that in the Accused Products, "the first subset of the values contains more values than the second subset of the values." Tr. 1077:1-13 [Fuja] ("[T]he second subset is actually bigger than the first subset. So, therefore, it does not infringe.").

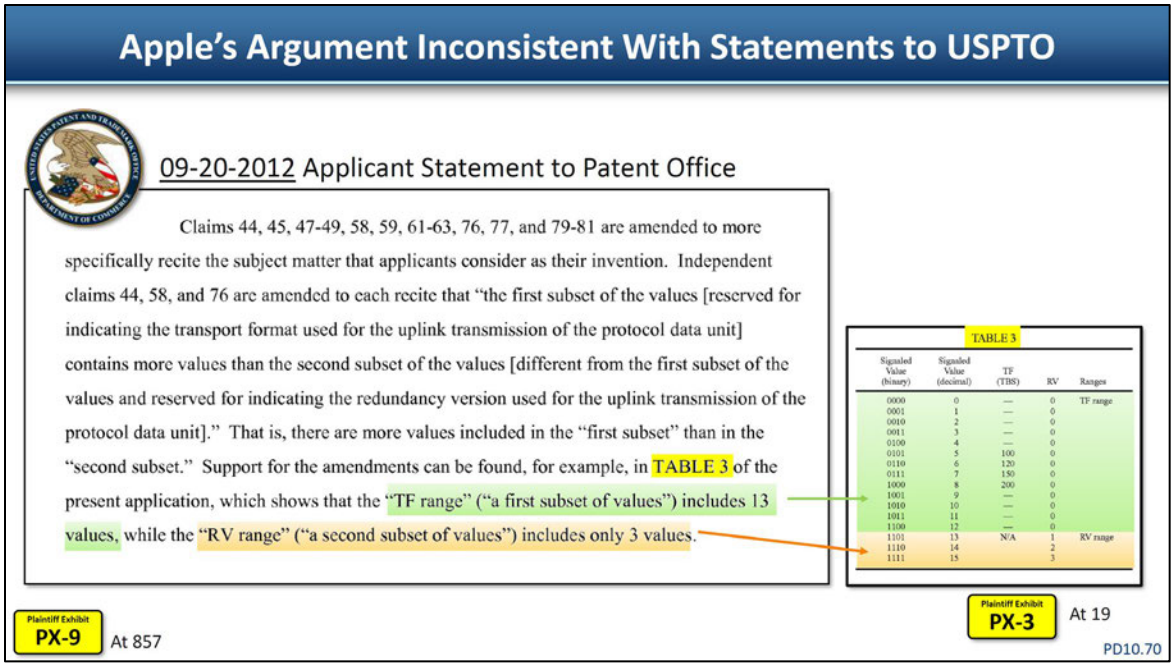
[redacted]

[redacted] Dr. Mahon explained how TS 36.213 related to Panasonic's 3GPP proposal and Table 3 of the '284 patent. Tr. 276:20-277:12. Apple does not dispute this relationship.





During prosecution of the '284 patent, applicant explained in relation to '284 Patent Table 3 that the first 13 rows in the "TF" range (colored in green) is "a first subset of values" and the last 3 rows in the "RV range" is "a second subset of values":

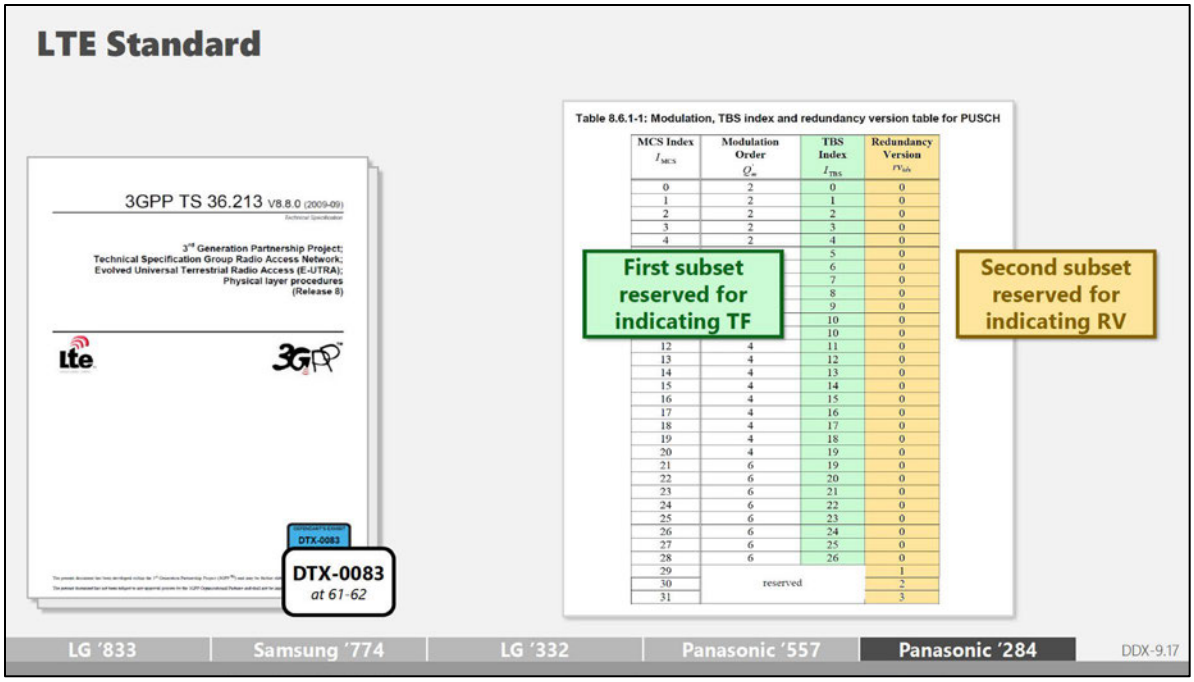


Ex. 13, PX 9 ('284 Pat. prosecution history) at 857 ("Support for the amendments can be found, for example, in TABLE 3 of the present application, which shows that the "TF range" ("a first subset of values") includes 13 values, while the "RV range" ("a second subset of values") includes only 3 values); Tr. 279:2–282:4 [Mahon] (explaining the plain meaning of this limitation as illustrated by the patent and the applicants' statements to the patent office during prosecution).

Apple attempted to brush aside this clear explanation of first and second subset of values by arguing that the statements are made by attorneys and not inventors themselves. Tr. 1090:2-17. That argument is wrong as a matter of fact. *See, e.g.*, *Pharmacia*, 170 F.3d at 1377 (affirming district court's consideration of "statements made by the attorney prosecuting the application"). Apple then points to Table 4 of the '284 patent to argue that the value of RV is not determinative of "TF Range" and "RV Range." Tr. 1073:6-1080:2. But the fact is, the prosecution history refers specifically to Table 3; and in every joint encoding example (Tables 3-8), the "RV range" corresponds to the last three entries of the table where "TF" is "N/A," just like in the accused products. Apple has not pointed to a single example in the specification that defines the second subset as including every single entry of the table.

The Federal Circuit has held that "a claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct." *Accent Packaging, Inc. v. Leggett & Platt, Inc.*, 707 F. 3d 1318, 1326 (Fed. Cir. 2013). And Apple's claim interpretation that excludes the preferred embodiment specifically called out during prosecution, and in fact every single preferred embodiment on joint encoding simply cannot stand under the prevailing Federal Circuit precedents.

Consequently, Apple's mapping in which the "second subset" in TS 36.213 table 8.6.1-1 includes all 32 entries in the table, including the first 29 rows with a redundancy version "0", finds no support in intrinsic record. Tr. 1075:23-1077:19 [Fuja]; Ex. 14 (Fuja demonstratives) at 17:



Apple's argument directly contradicts the patent specification and prosecution history, and does not provide a sufficient basis to find non-infringement of the '284 asserted claim. [redacted]

2. '284 Claim 27

The evidence at trial established that Apple's Accused Products infringe each element of '284 claim 27, and JMOL of infringement should be granted:

27. The method according to claim 14, wherein the transport format is transport block size information of the protocol data unit, and: Optis established, and Apple did not dispute, that the Accused Products practice this element. *See, e.g.*, Tr. 308:1-12 [Mahon] ("it takes the TBS index and it uses that to the table on the right to determine the transport block size."); Ex. 4, PX 63.27, 61-62.

wherein the received control channel signal further comprises a resource allocation field indicating the physical radio resource or resources allocated to the mobile terminal,: Optis established, and Apple did not dispute, that the Accused Products practice this element. *See, e.g.*, Tr. 308:13-21 [Mahon] ("DCI format 0 … one of those fields is a resource block assignment and hopping resource allocation field."); Ex. 3, PX 2142:43-44.

and said determining depends on the information comprised in the resource allocation field and the control information field.: Optis established, and Apple did not dispute, that the Accused Products practice this element. *See, e.g.*, Tr. 308:22-309:2 [Mahon] ("TBS index along with that physical resource allocation in green is used to determine in yellow here that transport block size."); Ex. 4, PX 63.27, 61-62.

No reasonable jury could find that Apple's Accused Products do not infringe the '284 asserted claims, and JMOL of infringement of the '284 Patent should be granted.

III. OPTIS IS ENTITLED TO JMOL OF WILLFULNESS

No reasonable jury could find that Apple did not willfully infringe the patents in suit, and JMOL of willfulness should be granted.

Apple admitted it had actual knowledge of the Asserted Patents and the relevant sections of the 4G LTE standard those patents read on—including claim charts provided by Optis mapping the

claims to the standards—as of at least 2017. Tr. 411:10-14 (Apple lawyer Mewes: "[Optis] provided a patent list and claim charts, I think, in June of 2017."); Ex. 15, PX 569 and Ex. 16, PX 570 (correspondence from Optis to Apple including patent list and noting which section of the standard each patent reads on); *see also* Tr. 201:23–203:4 [Blasius] ("[In 2017 Panoptis] notified Apple of our desire to have them comply with the law and take a license to our patents for the products that were using the patented technology); Tr. 257:20-258:7 [Blasius] ("We informed them that we had a claim chart that proves that we believe -- we believe that they're essential to the standards, and the claim charts is the proof and the evidence of that."); Tr. 564:25-565:11 [Madisetti] (explaining that Ex. 16, PX 570 "shows that you have a claim chart that confirms that these standards are practiced by the '284, '557, '332, '833, and the '774").

The evidence at trial also established that Apple launched infringing LTE devices beginning in 2012 without conducting proper due diligence to avoid infringement of Plaintiffs' LTE standard essential patents. Tr. 404:9-11 [Apple executive Blevins] ("And in 2012, Apple began to launch an LTE device. Correct? A. Yes."); Tr. 404:12-406:2 [Blevins] ("was responsible for acquiring modems that supported LTE" and "had meetings with senior technologists at Apple who played a role in the decision to implement LTE"; when asked "in these meetings, did anyone say, you know what, we really have to check to make sure we're not using other people's intellectual property for this LTE standard?" responded "I don't recall having a discussion on that topic…"). Further, Apple, in its ordinary course of business, referenced databases cataloging standard essential patents at least since 2017. Tr. 194:22-195:6 [Blasius] ("Apple uses that technology [Innography] to help analyze patents that relate to the LTE standard"); Tr. 408:4-23 [Apple director of IP Whitt] (Apple "in 2017" "had access to a database called innography"; database included "all of the declarations made by any party for standard essential patents"; "[i]f that information ["mapp[ing] what standard the patent was declared to"] was available, then it would access it").

No reasonable jury could find that Apple was not, at minimum, willfully blind to its infringement of the Asserted Patents. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 769 (2011) (evidence that the defendant copied its competitors' innovative product, but failed to have its patent attorney perform a search specifically for the competitor's patents, "plainly sufficient to support a finding of [] knowledge under the doctrine of willful blindness."); *see also Ironburg Inventions Ltd. v. Valve Corp.*, 64 F.4th 1274, 1296 (Fed. Cir. 2023) ("All of this provided the jury with substantial evidence to support a finding that Valve 'recklessly' disregarded Ironburg's patent rights and, therefore, willfully infringed. Thus, we affirm the district court's denial of Valve's motion and its entry of judgment of willful infringement."); *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc.*, 876 F.3d 1350, 1371 (Fed. Cir. 2017) ("proof that the defendant acted despite a risk of infringement that was 'either known or so obvious that it should have been known to the accused infringer,'—can support an award of enhanced damages.").

IV. CONCLUSION

For reasons stated above, the Court should reverse the jury's finding of non-infringement with respect to the '774 and '284 patents.

Dated: April 1, 2026

Respectfully submitted,

/s/ Andrew Strabone

Samuel F. Baxter
Texas State Bar No. 1938000
sbaxter@McKoolSmith.com
Jennifer Truelove
Texas State Bar No. 24012906
jtruelove@McKoolSmith.com
McKOOL SMITH, P.C.
104 E. Houston Street, Suite 300
Marshall, TX 75670
Phone: (903) 923-9000; Fax: (903) 923-9099

Jason Sheasby (pro hac vice)
jsheasby@irell.com
Hong Zhong, PhD
hzhong@irell.com
Rebecca Carson
rcarson@irell.com
Andrew Strabone
Astrabone@irell.com
IRELL & MANELLA LLP
1800 Ave of the Stars, Suite 900
Los Angeles, CA 90064
Phone: (310) 203-7096; Fax: (310) 203-7199

Steven J. Pollinger
Texas State Bar No. 24011919
spollinger@McKoolSmith.com
McKOOL SMITH, P.C.
300 W. 6th Street Suite 1700
Austin, TX 78701
Phone: (512) 692-8700; Fax: (512) 692-8744

M. Jill Bindler
Texas Bar No. 02319600
jbindler@grayreed.com
GRAY REED & MCGRAW LLP
1601 Elm Street, Suite 4600
Dallas, Texas 75201
Phone: (214) 954-4135; Fax: (469) 320-6901

ATTORNEYS FOR PLAINTIFFS OPTIS WIRELESS TECHNOLOGY, LLC, OPTIS CELLULAR TECHNOLOGY, LLC, AND PANOPTIS PATENT MANAGEMENT, LLC

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was served via electronic mail on all counsel of record on April 1, 2026.

/s/ Andrew Strabone
Andrew Strabone

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

This is to certify that this document should be filed under seal because the document, and any exhibits, contain material covered by the Stipulated Protective Order approved and entered in this case on August 7, 2019 (Dkt. 57).

/s/ Andrew Strabone
Andrew Strabone