

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION

NIPPON TELEGRAPH AND	)	
TELEPHONE CORPORATION and	)	
ESSENTIAL WIFI LLC,	)	
	)	
Plaintiffs,	)	C. A. No. 1:20-cv-00632-ADA
	)	
v.	)	
	)	<b>JURY TRIAL DEMANDED</b>
MEDIATEK INC. AND	)	
MEDIATEK USA INC.	)	
	)	
Defendants.	)	

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NIPPON TELEGRAPH AND	)	
TELEPHONE CORPORATION and	)	
ESSENTIAL WIFI LLC,	)	
	)	
Plaintiffs,	)	C. A. No. 1:20-cv-00769-ADA
	)	
v.	)	
	)	<b>JURY TRIAL DEMANDED</b>
ACER INC. AND	)	
ACER AMERICA INC,	)	
	)	
Defendants.	)	

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NIPPON TELEGRAPH AND	)	
TELEPHONE CORPORATION and	)	
ESSENTIAL WIFI LLC,	)	C.A. No. 1:20-cv-00583-ADA
	)	
Plaintiffs,	)	
	)	
v.	)	<b>JURY TRIAL DEMANDED</b>
	)	
TEXAS INSTRUMENTS INC.,	)	
	)	
Defendant.	)	

**PLAINTIFFS' REPLY IN SUPPORT OF THEIR OPENING**  
**CLAIM CONSTRUCTION BRIEF**

MediaTek Exhibit 1057 MediaTek v. Nippon IPR2020-01404
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## **TABLE OF CONTENTS**

I.	U.S. PATENT NO. 7,242,720 (“THE ’720 PATENT”).....	1
A.	Disputed Claim Term #1: “interference canceller” (’720 Pat. cl. 18, 19, 21, 22, 31, 32).....	1
B.	Disputed Claim Term #2: “Among” (cls. 18, 22, 31).....	4
II.	U.S. PATENT NO. 7,280,551 (“THE ’551 PATENT”).....	5
A.	Disputed Claim Term #3: “transmitting a plurality of wireless packets simultaneously” (’551 Pat. cl. 1, 2, 5 and 6 preamble).....	5
B.	Disputed Claim Term #4: “wireless channels” / “multiple wireless channels” (’551 Pat. cl. 1, 2, 4, 5, 6 and 8).....	7
C.	Disputed Claim Term #5: “mandatory channel” (’551 Pat. cl. 1, 2, 5 and 6) .....	7
III.	U.S. PATENT NO. 7,400,616 (“THE ’616 PATENT”).....	10
A.	Disputed Claim Term #6: “data packets” (’616 Pat. cl. 1 and 5) .....	10
B.	Disputed Claim Term #7: “transmitting a plurality of data packets simultaneously” (’616 Pat. cl. 1) .....	11
IV.	U.S. PATENT NO. 7,545,781 (“THE ’781 PATENT”).....	12
A.	Disputed Claim Term #8: “simultaneously transmitting . . . a plurality of wireless packets” (’781 Pat. cl. 1 and 16).....	12
B.	Disputed Claim Term #9: “multiple wireless channels” / “wireless channels” (’781 Pat. cl. 1, 9, 16 and 24).....	12
C.	Disputed Claim Term #10: “paired wireless channel” (’781 Pat. cl. 1 and 16) .....	12
D.	Disputed Claim Term #11: “predetermined time Ts” (’781 Pat. cl. 1 and 16).....	13
E.	Disputed Claim Term #12: “setting. . .” (’781 Pat. cl. 1) / “a virtual carrier sense unit . . .” (’781 Pat. cl. 16) .....	15
V.	CONCLUSION .....	15

## **TABLE OF AUTHORITIES**

<b>CASES</b>	<b>Page</b>
<i>Altiris, Inc. v. Symantec Corp.</i> , 318 F.3d 1363, 1373 (Fed. Cir. 2003) .....	9
<i>Am. Med. Sys., Inc. v. Biolitec, Inc.</i> , 618 F.3d 1354 (Fed. Cir. 2010).....	5, 6, 11
<i>Digital-Vending Servs. Int'l, LLC v. Univ. of Phoenix, Inc.</i> , 672 F.3d 1270 (Fed. Cir. 2012).....	8
<i>Eko Brands, LLC v. Adrian Rivera Maynez Enterprises, Inc.</i> , 946 F.3d 1367 (Fed. Cir. 2020).....	5
<i>Facebook, Inc. v. BlackBerry Ltd.</i> , 2019 WL 6828359 (N.D. Cal. Dec. 13, 2019).....	9
<i>In re Man Mach. Interface Techs. LLC</i> , 822 F.3d 1282 (Fed. Cir. 2016).....	4
<i>Liberty Ammunition, Inc. v. United States</i> , 835 F.3d 1388 (Fed. Cir. 2016).....	14
<i>Maury Microwave, Inc. v. Focus Microwaves, Inc.</i> , 2012 WL 9161988 (C.D. Cal. July 30, 2012).....	13
<i>O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.</i> , 521 F.3d 1351 (Fed. Cir. 2008).....	2
<i>Pacing Techs., LLC v. Garmin Int'l, Inc.</i> , 778 F.3d 1021 (Fed. Cir. 2015).....	6
<i>Sol IP v. AT&amp;T Mobility LLC</i> , 2019 WL 6879403 (E.D. Tex. Dec. 17, 2019).....	14
<i>TomTom, Inc. v. Adolph</i> , 790 F.3d 1315, 1323 (Fed. Cir. 2015).....	12
<i>TQ Delta, LLC v. 2WIRE, Inc.</i> , 2018 WL 4062617 (D. Del. Aug. 24, 2018).....	6
<i>Uniloc USA, Inc. v. Microsoft Corp.</i> , 632 F.3d 1292 (Fed. Cir. 2011).....	4
<i>Unwired Planet, LLC v. Apple Inc.</i> , 829 F.3d 1353 (Fed. Cir. 2016).....	2

**TABLE OF AUTHORITIES**

<b>CASES (cont.)</b>	<b>PAGE</b>
<i>Vitronics Corp. v. Conception, Inc.</i> , 90 F.3d 1576 (Fed. Cir. 1996).....	2
 <b>OTHER AUTHORITIES</b>	
Steven W. Smith, THE SCIENTIST AND ENGINEER'S GUIDE TO DIGITAL SIGNAL PROCESSING, (1997) .....	2

Plaintiffs Nippon Telegraph and Telephone Corp. and Essential WiFi, LLC respectfully submit this Reply to Defendants' Responsive Brief (Dkt. No. 45, "Response").

**I. U.S. PATENT NO. 7,242,720 ("THE '720 PATENT")**

**A. Disputed Claim Term #1: "interference canceller" ('720 Pat. cl. 18, 19, 21, 22, 31, 32)**

Defendants argue that the "plain meaning" of "interference canceller" in the '720 Patent includes an equalizer (Response at 3-4), but Plaintiffs' Opening Brief demonstrated that one of the very problems that the '720 solved was to *free* interference cancellers from dependence on equalizer function. (Dkt. No. 37 at 2-6) (hereinafter "Op. Br."). If "interference cancellers" were read to include equalizers, this would eliminate a key aspect of the '720 Patent. Thus, Defendants' arguments make clear that their opaque "plain meaning" construction will be used to read the claims in a way that directly contradicts the specification.

That the specification establishes that "interference cancellers" and "equalizers" are different things is beyond question, as addressed in detail in Plaintiffs' Opening Brief. *See* Op. Br. at 2-6. Tellingly, although Defendants assert there is no basis for excluding equalizers in the intrinsic record, they cannot point to a single cite suggesting that "interference cancellers" and "equalizers" could somehow be the same. *See* Response at 3. Instead, Defendants focus only on the word "interference" in the acronym "ISI" to argue that the specification does not explicitly exclude any specific type of "interference." *See id.* This is mere misdirection, and fails for multiple reasons: First, the specification could not be clearer that "interference *cancellers*" are not the same as equalizers, and that "interference cancellers" serve a different function in signal processing than equalizers. *See, e.g.,* '720 Patent at 2:12-17; 31-34; 4:63-5:4. Second, Defendants' suggestion that Mr. Geier agreed that "interference cancellers" perform "the processing" of equalizers is not correct—rather, his testimony merely suggests that it is possible for interference cancellation, in a general sense, to work in *units* of frequency or time, which, as known in the art, are readily interchangeable using FFT. *See* Dkt. No. 45, Ex. 1 (hereinafter "Geier Dep.") at 119:17-120:5 (possible that interference cancellation can deal with undesired signal characteristics in terms of "amplitude frequency and/or phrase frequency"); Ex. X

(“Smith”)<sup>1</sup>. In other words, simply because operation A can be performed on data expressed in certain units, and operation B can also be performed on data of the same units, does not mean that operation A and operation B are the same. Third, Defendants fail to address the fact that the specification uses the term “interference” to refer to unwanted signals or noise, which is consistent with the ordinary meaning of that word. *See* Op. Br. at 7, citing ’720 Patent at 3:48-51 (linking “interference” to “noise”). Plaintiffs’ proposed construction properly uses the intrinsic record as the guiding context from which to determine the proper plain meaning.<sup>2</sup>

Indeed, Defendants make no attempt to address Plaintiffs’ evidence that the ordinary meaning of “interference” generally refers to the effects of unwanted signals and noise from some *external* source, and that equalizers are not commonly understood to address “interference” in this ordinary sense. *See* Op. Br. at 7-8, citing Exs. J, K (dictionary definitions for “interference” and “equalizer”). Tellingly, Defendants provide no evidence of any definition for “interference cancellers” that includes equalizers, nor any definitions for “interference” contrary to those put forth by Plaintiffs. *See* Response at 2-5. Instead, they mischaracterize Mr. Geier’s testimony as agreeing that Plaintiffs’ construction does not reflect plain meaning, when he merely confirmed that the proposed construction is rooted in the context of the ’720’s specification. *See* Geier Dep. at 64:14-66:10. Claim construction is designed to resolve disputes over the scope of the specific patent claims they appear in—whether or not this definition is encyclopedically complete for all potential contexts or uses is not the question, and Mr. Geier’s testimony is consistent with this principle. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (claim construction is a matter of resolving disputes

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<sup>1</sup> Steven W. Smith, *THE SCIENTIST AND ENGINEER'S GUIDE TO DIGITAL SIGNAL PROCESSING*, (1997) at Chapter 12 (available at <https://www.dspguide.com/ch12/2.htm>).

<sup>2</sup> Where a term may be susceptible to more than one interpretation within the scope of its ordinary meaning, it is proper to look to the specification to determine its more precise meaning. *See e.g. Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). A construction arrived at via the latter method is not “lexicography”—rather, this is what is meant by determining the plain and ordinary meaning “when read in the context of the specification and prosecution history.” *See e.g., Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1358 (Fed. Cir. 2016).

over claim scope). Moreover, contrary to Defendants’ suggestion, Mr. Geier consistently emphasized the differences between interference cancellation, which is directed to unwanted signals and noise, from equalization, which addresses channel distortion. *See, e.g.*, Geier Dep. at 80:11-81:5 (equalization addresses channel distortion, interference cancellation addresses noise), 79:2-6 (ZF equalization **increases** noise).

Defendants’ suggestion that Plaintiffs’ infringement contentions indicate that interference cancellers can include ZF equalizers is incorrect. First, the referenced section relates to the “inverse matrix computer,” rather than “interference canceller.” Dkt. 45, Ex. 2 (’720 chart) at 11, 13. Second, Defendants ignore the fact that Plaintiffs’ explanatory text makes **no reference** to ZF equalizers, but rather refers to SVD and QRD as known methods for calculating inverses. *Id.* at 11. Consistent with this explanation, the screenshot that Defendants refer to provides an explanation for QRD. *See id.* The uppermost portion of this screenshot includes a reference to ZF, but this portion is included because it provides context to the discussion of QRD, such as definitions of variables like H, not because it refers to ZF. *Id.* Nothing in Plaintiffs’ contentions that suggests that a ZF equalizer may be an interference canceller; it cannot.

Defendants’ claim that Plaintiffs’ proposed construction somehow amounts to a negative limitation simply because it does not include equalizers is nonsensical. The specification teaches that interference cancellers and equalizers are different devices that are designed to serve different functions. The ordinary meanings for “interference” and “equalization/equalizers” are consistent with the patent’s usage. Thus, that the meaning of interference cancellers excludes equalizers does not make it a “negative limitation” crafted for this litigation, but instead accurately reflects the taxonomy of these terms in the art.<sup>3</sup>

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<sup>3</sup> Defendants’ suggestion that the Raleigh reference cited in MediaTek’s IPR addresses “substantial[] eliminate[ion] of ISI caused by the channel correlation across space (antenna correlation)” is neither here nor there. Response at 2-3, fn3 (ellipses in original). First, the scope and contents of Raleigh are not necessary to the Court’s determination of whether the term “interference canceller” in the ’720 includes an equalizer. Second, Raleigh does not actually teach that an equalizer accomplishes the cited effect—rather, Raleigh attributes this to the use of SOP bins, such as OFDM subcarriers. Ex. Y (Raleigh) at 2:44-49.

Finally, Defendants’ argument that the phrase “designed to” somehow incorporates an element of subjective intent smacks of desperation. Every man-made article is designed to serve some function—that is why so many patents relate to devices “for” some function or otherwise indicate a particular purpose. *See, e.g., In re Man Mach. Interface Techs. LLC*, 822 F.3d 1282, 1286 (Fed. Cir. 2016) (“adapted to be held by the human hand” construed to mean “designed or made to be held by the human hand”); *see also* Ex. Z (dictionary defining “design” as “to devise for a specific function or end”). That a chair is “designed to” be used for sitting does not mean that it only exists when someone “intends” to sit on it.

**B. Disputed Claim Term #2: “Among” (cls. 18, 22, 31)**

Although the *only* difference between Defendants’ proposal and the existing claim language is replacing the word “among” with “operating in connection with,” Defendants now argue that they are also trying to interpret the phrase “at least” when used together with the word “among.” Response at 6. This argument still falls far short of the mark—the phrase “at least” is also an ordinary phrase that, alone or in combination with the word “among,” *still* does not mean “operating in connection with.” Indeed, Defendants’ arguments demonstrate why their construction is neither correct nor necessary—their own explanation for this claim language does not actually use their proposal at all. Response at 6. Defendants assert conclusorily that the words “at least” and “among” as used in the claims are “confusing” (Response at 5), but fail to explain why this language is not clear or how else it could be interpreted.

Defendants’ argument that the claimed device, such as in claim 18, functions within the context of a system likewise cannot explain why the words “at least” and “among” must be rewritten as “operating in connection with.” Indeed, claim 18 is directed to a transmitting *device*, not a system, even if this device may be used in the environment of a system. *Compare, e.g.,* cl. 18 (“An OFDM signal transmitting **device**”), *with* cl. 1 (“An OFDM signal communication **system**”) (emphases added). Defendants are improperly trying to inject a requirement for an action performed by unclaimed components, despite well-settled law that the environment for a claimed device does not limit the device itself. *See e.g., Uniloc USA, Inc. v. Microsoft Corp.*,



632 F.3d 1292, 1309 (Fed. Cir. 2011) (claim language describing the “environment” in which a claimed registration system functioned not limiting, “[t]hat other parties are necessary to complete the environment in which the claimed element functions does not necessarily divide the infringement between the necessary parties.”); *Eko Brands, LLC v. Adrian Rivera Maynez Enterprises, Inc.*, 946 F.3d 1367, 1377 (Fed. Cir. 2020) (claim to a beverage brewing device “does not require a beverage brewer”; “[t]o the extent that claim 8 mentions a beverage brewer, it is only as a “reference point” to define the purpose and structure of the brewing device”).

## II. U.S. PATENT NO. 7,280,551 (“THE ’551 PATENT”)

### A. Disputed Claim Term #3: “transmitting a plurality of wireless packets simultaneously” (’551 Pat. cl. 1, 2, 5 and 6 preamble)

Defendants’ arguments as to why the preamble language “transmitting a plurality of wireless packets simultaneously” is limiting rely heavily on purported antecedent basis (“the packets” in claim 1; reference to “the simultaneously transmitted packets” in dependent claim 3). Response at 8. These arguments cannot withstand scrutiny.

First, there is no bright-line rule that use of the word “the” means a preamble is limiting—rather, the focus remains on “the facts of each case in light of the claim as a whole and the invention described in the patent.” See *Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358 (Fed. Cir. 2010) (“*AMS*”, citing *Storage Tech. Corp. v. Cisco Sys., Inc.*, 329 F.3d 823, 831 (Fed.Cir.2003)). In this instance, although claim 1 refers to transmitting “the wireless packets,” the language that Defendants are trying to import is “transmitting... *simultaneously*.” Response at 8-9. Simultaneous transmission is *not* an antecedent basis for “packets,” and whether or not transmission is “simultaneous” is not necessary to give “life, meaning, and vitality” to the step of transmitting only when a “mandatory channel” is idle.

The *AMS* case is instructive. In *AMS*, the lower court found that the preamble language “photoselective vaporization of tissue” was limiting because it provided antecedent basis for the claimed method’s reference to “the tissue.” 618 F.3d at 1358. The Federal Circuit reversed, reasoning that “the preamble term ‘photoselective vaporization of tissue’ does not provide a necessary antecedent basis for the term ‘the tissue’ in the bodies of each of the independent

claims.” *Id.* In particular, whether vaporization is “photosensitive” does not provide any “context essential to understanding” the meaning of “tissue” in the claim. *Id.* at 1359. Here, as in *AMS*, Defendants seek to import a specific action—simultaneous transmission—even though the claim body merely refers to “the packets.” “Simultaneous transmission” provides no more essential context to the meaning of “packets” than “photosensitive vaporization” did for “the tissue” in *AMS*. At heart, the ’551 Patent relates to a way of managing channel usage in a multi-channel system—by setting one of multiple channels as a “mandatory channel” and limiting transmission to times only when this channel is idle. *See Op. Br.* at 9-10. That the embodiments illustrate that this method can avoid problems that might otherwise impact simultaneous transmission does not mean that the method only exists when simultaneous transmission occurs. Indeed, the specification teaches that problems of leakage “occurs **not only** in case of simultaneous transmission using multiple wireless channels but also in a conventional case where wireless packets are transmitted by using one wireless channel and an adjacent wireless channel that is affected by leakage power receives the wireless packets.” ’551 Patent at 3:27-32 (emphasis added).

Defendants’ argument pertaining to dependent claim 3 also fails. While the preamble in the *Pacing* case was found limiting on an independent claim, in part, because a dependent claim relied on it for antecedent basis, subsequent courts applying *Pacing* have determined that it did **not** create “a bright-line rule that a preamble is limiting whenever it provides antecedent basis for a term in a dependent claim.” *E.g., TQ Delta, LLC v. 2WIRE, Inc.*, 2018 WL 4062617, at \*5 (D. Del. Aug. 24, 2018). Instead, that a dependent claim relies on preamble language for antecedent basis simply indicates that the preamble is limiting *as to that claim*. *Id.* Indeed, not even *Pacing* relied solely on antecedent basis for a dependent claim—rather, the court relied heavily on finding that the specification included an “unmistakeable disclaimer” that justified importing the preamble. *See Pacing Techs., LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1025 (Fed. Cir. 2015)). Defendants point to no “unmistakeable disclaimer” limiting the claimed methods to instances of “simultaneous transmission” here.

**B. Disputed Claim Term #4: “wireless channels” / “multiple wireless channels” (’551 Pat. cl. 1, 2, 4, 5, 6 and 8)**

As Defendants have accepted Plaintiffs’ proposal, this term is no longer in dispute.

**C. Disputed Claim Term #5: “mandatory channel” (’551 Pat. cl. 1, 2, 5 and 6)**

Defendants argue that the claimed “mandatory channel” should be given a “plain meaning,” but in doing so ask the Court to find that this means the “mandatory channel” need not be one of multiple provided channels, but merely the *only* channel provided. Response at 11. This is not correct—there is a significant difference between *using* only one channel out of many provided, and only being *provided* one channel at the outset. One cannot read the ’551 Patent in its entirety and conclude that setting and using a “mandatory channel” means nothing more than transmitting on a single provided channel, as has always been done in wireless communications (*see* ’551 Patent at 1:24-32)—there is nothing “mandatory” about this sole channel because there are no other non-mandatory channels to distinguish it against. Rather, the “mandatory channel” must be one of multiple channels *provided*, even if it may be *used* by itself. Adopting Defendants’ opaque “plain meaning” proposal would not resolve this dispute over claim scope.

Defendants attempt to tar Plaintiffs’ arguments as relying “extensively on extrinsic evidence,” but fail to squarely address the intrinsic support set forth in Plaintiffs’ Opening Brief. *See* Response at 15. For example, Defendants provide *no reasoning* as to why the modifier “mandatory” does not itself indicate the presence of other, non-mandatory channels, nor why the requirement that transmission on a wireless channel or wireless channels can “only” occur when the “mandatory channel” is idle does not indicate that there are other provided channels that are not used even if idle, if the “mandatory channel” is busy. *See id.* Instead, Defendants merely assert conclusorily that this language does not “require” the presence of multiple channels provided between two STAs, and attempt to suggest that Mr. Geier “admitted” that there may be “other channels” beyond those available. This argument misses the point. Mr. Geier merely clarified that Federal regulations may allow other channels to be defined, but that may or may not be used by any devices (Geier Dep. at 144:11-14), but this in itself is irrelevant to whether or not a *particular STA* may be able to distinguish a “mandatory channel” from “non-mandatory

channels,” which can only be done with reference to channels that are actually provided for its use. Hypothetical channels other than those actually provided are irrelevant to how this STA manages its channel usage. As Mr. Geier repeatedly emphasized, “setting a mandatory channel” and transmitting “only” when it is idle requires identification of ***one of multiple channels provided*** between STAs as having special status. *E.g.*, Geier Dep. at 122:6-123:10; 123:25-124:11; 126:23-127:9; 128:15-21; 132:10-20; 138:17-139:6. By contrast, Defendants’ tortured reading renders all this language superfluous. This is plainly improper. *See, e.g., Digital-Vending Servs. Int’l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012) (“claims are interpreted with an eye toward giving effect to all terms in the claim”).

Tellingly, although Defendants claim that the specification “expressly contemplates single-channel embodiments,” they cannot point to a single cite to support that claim. *See* Response at 15. Rather, ***every*** embodiment refers to either the First or Second Embodiments, and both of these identify one of multiple channels provided between two STAs as a “mandatory channel.” *E.g.*, ’551 Patent at 5:52-55; 7:8-12. The statement that transmission cannot occur when the “mandatory channel” is busy, “even if there is another channel” does not indicate that a “mandatory channel” can ***exist*** without another channel. Rather, placed in context, it is clear that the specification is teaching that no transmission occurs “even if” another channel could be ***used***. *See, e.g.*, ’551 Patent at 5:55-57 (“When the mandatory channel is busy, each STA does not perform transmission even if there is other ***idle*** wireless channel.”) (emphasis added).

Nothing in the prosecution history of the ’551 Patent, nor the related EP application cited in the Response, supports Defendants’ arguments. Indeed, during prosecution of the ’551, the ***only*** references under consideration pertained to multichannel systems with more than one channel was provided between two STAs. *See* Dkt. No. 45, Ex. 3, 2/15/2007 Office Action at 2; 5/11/2007 Resp. at 6-7. Far from supporting Defendants’ claim, the file history demonstrates that both the applicant and examiner regarded the ’551 patent as pertaining to multi-channel systems. The history of a related EP application also cannot support Defendants’ arguments. First, this is merely a related foreign application, not the application leading to the ’551 patent

itself. Second, the applicant of that related application did not agree that the claims pertained to a single channel. Rather, the examiner's issue related to clarity of the language, and in response the applicant argued that the language is clear and clarified that the case of **using** a single channel is supported by the specification. *See* Dkt. No. 45, Ex. 4 at 15 (10/30/2011 Resp. at 3) (“The wireless packets can be transmitted by **using** a single wireless channel...for example described in the third and fourth embodiment.”). Further, the applicant added clarifying language that made more explicit that the mandatory channel is “one of multiple wireless channels,” citing to the original disclosure—in fact the same language that Plaintiffs rely on for their proposed construction—as support. *Id.* at 39-40 (6/21/2012 Resp. at 1-2). On the whole, the EP proceedings confirm Plaintiffs’ construction as correct.

Defendants cite to *Altiris* and *Facebook* for the proposition that even a coined term, may be given a “plain meaning” based on its constituent words. Response at 10-11, 13. Neither case is applicable here. In *Altiris*, the ordinary meaning of “flag,” which is “a signal or marker **to identify** a status, a condition, or an event,” already indicates that additional context is required to specify what that “status, condition, or event” is. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1373 (Fed. Cir. 2003) (emphasis added). Thus, the disputed term “boot selection flag” is simply a flag that is used “to identify” selection of boot cycle, because the words “boot selection” fill in the gap specified by the ordinary meaning of “flag.” *See id.* Similarly, in *Facebook*, the word “information” in the disputed term “multimedia data delivery information” is, like “flag,” a generic term that in itself demands additional context to specify what it is. *Facebook, Inc. v. BlackBerry Ltd.*, 2019 WL 6828359, at \*10 (N.D. Cal. Dec. 13, 2019). Unlike *Altiris* and *Facebook*, however, the ordinary meaning of “channel” does not indicate what modifying it with “mandatory” would mean, and the word “mandatory” by itself does not explain what it is about a “mandatory channel” that is “mandatory.” Recourse to the specification is proper.

### III. U.S. PATENT NO. 7,400,616 (“THE ’616 PATENT”)

#### A. Disputed Claim Term #6: “data packets” (’616 Pat. cl. 1 and 5)

Defendants’ arguments concerning “data packets” are rife with contradiction. On the one hand, Defendants claim that they are not trying to construe “data packets” as limited to an MPDU (Response at 17), but on the other hand also argue that a “data packet” includes specific overhead “including at least address and error correction information” (Response at 17-18). Once again, Defendants’ arguments make clear that their “plain meaning” proposal is simply a screen for obscuring claim scope.

Tellingly, Defendants fail to provide any support for their vague suggestion that “packets” must include overhead information. For instance, Defendants admit that Plaintiff’s proposed construction is derived from technical dictionaries, but cite neither technical dictionaries nor other references showing that a POSA would understand the term “data packet” to have a meaning narrower than demonstrated in Plaintiffs’ support. *See* Response at 18. Defendants further fail to provide any expert testimony showing that a POSA would understand the term “data packet” to have a meaning other than the meaning provided Plaintiff’s expert in view of these technical dictionaries, unlike Plaintiffs. *See* Op. Br. at 19-20; Ex. E at ¶¶73-79. In the absence of any evidence contradicting Plaintiffs’ evidence, the Court should adopt Plaintiffs’ proposal.

Defendants’ other arguments against Plaintiff’s construction are easily refuted. First, Defendants argue that the construction is inconsistent with the testimony of Plaintiffs’ expert. Response at 16. However, Plaintiff’s expert merely indicated that organizing data into “units” of information, already explicit in the proposed construction, was different from a continuous byte stream as explained in Plaintiffs’ Opening Brief. *See* Op. Br. at 19-20; Ex. E at ¶77.

Second, Defendants improperly attempt to read numerous design details of particular data packets from the embodiments into Defendants’ supposed “plain meaning” construction, citing the specific pieces of overhead information identified for the embodiment disclosed in Fig. 11. Response at 17. Conspicuously absent, however, is any identification by Defendants of any statement disavowing coverage of simpler data structures that lack these or other overhead data.

Indeed, the NACK packet described in '616 patent does not contain address or error correction information, instead containing completely different information (e.g., “packet type information, receive-side STA ID (a transmit-side STA of data packets), and a sequence number of each data packet not received successfully”). *Id.* (citing '616 Patent at 6:29-34). Thus, the '616 Patent itself teaches that each specific piece of overhead information in the embodiments is optional, and there is no disclaimer of transmissions containing all, some, or none of the particular pieces of overhead information. In this, the '616 specification is consistent with the dictionaries Plaintiffs cited, which do not require any particular overhead information.

Defendants attempt to rely upon unlabeled and unidentified boxes from the '551 Patent, as purportedly supporting their position. Response at 18. However, Defendants admit that Figure 3 of the '551 Patent merely “shows an empty box.” *Id.* There is ***nothing*** in the figure or accompanying text that identifies this empty box as “overhead,” as Defendants contend. Rather, as discussed in Plaintiffs’ Opening Brief, Fig. 3 shows that the term “data packet” need not include any of the overhead items associated with a MAC header. Defendants cite to a description of particular overhead information from the '551 specification, but this description ***does not*** describe Fig. 3, but rather Fig. 17, which pertains to a different embodiment unrelated to Fig. 3. *See* Response at 18. However, even here, there is no indication that the term “packet” is limited to data units to all, some, or any of the fields depicted in Fig. 17.

**B. Disputed Claim Term #7: “transmitting a plurality of data packets simultaneously” ('616 Pat. cl. 1)**

Defendants reference their previously presented arguments for the '551 patent preamble term. Response at 19. But, as discussed above, although the claim refers to “said plurality of packets,” Defendants attempt to import a limitation not directed to the plurality of packets but rather the specific action of “transmitting...simultaneously.” *Id.* *See supra* Sec.II.A. *See Am. Med. Sys., Inc.*, 618 F.3d at 1358-59. This is incorrect for reasons similar to those addressed with respect to the preamble of the '551 Patent. Further, whether or not the claimed steps are performed with reference to a “plurality of packets” does not justify adding a distinct step of

“transmitting” to the claim. Claim 1 is deliberately drafted to omit action by a transmitting STA, so it would be improper to add one.

#### IV. U.S. PATENT NO. 7,545,781 (“THE ’781 PATENT”)

##### A. Disputed Claim Term #8: “simultaneously transmitting . . . a plurality of wireless packets” (’781 Pat. cl. 1 and 16)

Defendants argue that the act of “simultaneously transmitting...a plurality of wireless packets” should be imported from the preamble, but their purported reasoning for doing so is that the claim body refers to “said transmit-side STA.” Response at 20. Defendants fail to confront Plaintiffs’ arguments: As discussed in the Opening Brief, the Federal Circuit’s analysis in *TomTom* shows that just because *some part* of preamble may provide antecedent basis for a claim body, it **does not** follow that **all** parts of that preamble become limiting. Op. Br. at 24. Here, the term “said transmit-side STA” does not rely on the “simultaneously transmitting” phrase for antecedent basis. Further, simply because the claimed method produces benefits by preempting problems that may occur in the course of simultaneous transmission, does not mean that the method only exists when simultaneous transmission is occurring. Indeed, claims 1 and 16 are deliberately drafted so as not to include “transmitting” steps.

##### B. Disputed Claim Term #9: “multiple wireless channels” / “wireless channels” (’781 Pat. cl. 1, 9, 16 and 24)

As Defendants have accepted Plaintiffs’ proposal, this term is no longer in dispute.

##### C. Disputed Claim Term #10: “paired wireless channel” (’781 Pat. cl. 1 and 16)

Defendants argue, based on lexicography, that “paired wireless channel” is defined as a channel “that **would** be affected by leakage,” but fail to confront Plaintiffs’ intrinsic support indicating that a “paired wireless channel” in fact encompasses more than that. *See* Response at 22-23. Indeed, as pointed out in Plaintiffs’ Opening Brief, the ’781 specification teaches that an inhibition time may be set to channels **other than** those that would experience actual leakage. Op. Br. at 25-26. For example, the specification contrasts the fourth embodiment as being “actually affected by leakage” with “the second embodiment which is directed to **all the wireless channels** other than the wireless channel having the longest transmission time.” *Id.* at 18:65-



19:3. (emphasis added). Thus, the specification itself teaches that the concept of “paired wireless channel” is meant to span the ordinary meaning of the word “paired,” which requires an association for the purposes of setting inhibition time.<sup>4</sup> Defendants’ proposal, on the other hand, only describes *two of twenty-seven* embodiments. Defendants provide no justification for disregarding the rest of the specification.

Defendants argue that addressing leakage is a purpose of the ’781 Patent. Response at 23. However, the fact that the methods claimed in the ’781 Patent can help avoid certain issues associated with leakage does not mean that the presence of leakage is required in order to practice these methods—indeed, that the specification distinguishes between embodiments where leakage is actually detected from those where inhibition time is set to “all the wireless channels” shows that the claimed steps are intended to be prophylactic, and may be designed to encompass more channels than might be necessary at any given moment. *See e.g., id.* at 18:65-19:3. Defendants cannot be allowed to cherry-pick the narrowest interpretation for “paired wireless channel” when the specification clearly demonstrates breadth.

#### **D. Disputed Claim Term #11: “predetermined time Ts” (’781 Pat. cl. 1 and 16)**

Defendants’ arguments that this term is lexicographically redefined are easily refuted. First, the *Maury Microwave* case Defendants rely on is wholly inapposite, because that case concerned the use of “corresponding to” not in relation to a parenthetical in a portion of the specification, but rather as recited *in the language of the claim itself*. *Maury Microwave, Inc. v. Focus Microwaves, Inc.*, 2012 WL 9161988, at \*21 (C.D. Cal. July 30, 2012). This stands in stark contrast to the present case where the parenthetical merely provides additional information as to how the predetermined time is provided for the particular embodiment being described—there is *no indication* that this parenthetical is meant to be definitional for all embodiments. The fact that the parenthetical does not appear in relation to other discussions of predetermined time

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<sup>4</sup> Defendants incorrectly argue that Plaintiffs provided “no clue” as to what “plain meaning” is, intentionally ignoring, and not even addressing, the detailed discussion in Plaintiffs’ opening brief explains why the term “paired” should be construed in its ordinary sense and cites a well-known dictionary defining “paired” as “to become associated with another.” Op. Br. at 26-27.

in other embodiments indicates that it is **not** intended to be lexicographical, but merely descriptive of that embodiment. *See, e.g., Sol IP v. AT&T Mobility LLC*, 2019 WL 6879403, at \*10 (finding that a parenthetical in the specification was not definitional, but described the specific longer phrase that appeared around it). Defendants’ argument based on the indefinite article “a” likewise falls short—that inhibition time in one embodiment may be defined with reference to “a received packet” does not define inhibition time for other embodiments lacking that phrase.

Finally, there is no credible argument that the phrase “predetermined time  $T_s$ ” is indefinite because, as Defendants concede, the meaning of this phrase is apparent from the ordinary words “predetermined” and “time.” *See* Response at 25. . However, Defendants misrepresent the holding of the *Liberty Ammunition* case, which dealt specifically with terms of degree, stating that “the term ‘**reduced** area of contact’ is **one of degree**, as it necessarily calls for a comparison against some baseline” *Liberty Ammunition, Inc. v. United States*, 835 F.3d 1388, 1395 (Fed. Cir. 2016). Unlike *Liberty Ammunition*, the phrase ‘predetermined time’ is not one of degree. Moreover, whereas the claims at issue in *Liberty* did not provide a “baseline” for comparison, here the language of the claim itself shows that the “predetermined time  $T_s$ ” is relative to the calculation of the sum of  $T_s$  and  $T_{max}$ , which is the longest transmission time. Specifically, Claim 1 recites: “setting, by said transmit-side STA, time ( **$T_{max}+T_s$** ) as transmission inhibition time . . . the time ( $T_{max}+T_s$ ) being obtained by **adding** a predetermined time  $T_s$  **to the longest transmission/reception time  $T_{max}$** .” Consequently, the language of claim 1 itself shows the  $T_s$  is predetermined if it is known prior to the calculation of  $T_{max} + T_s$ . This is consistent with the specification, which repeatedly describes predetermined time  $T_s$  in relation to the calculation of the sum of  $T_{max}$  and  $T_s$ . *See, e.g.,* ’781 patent at 4:44-50; 8:6-12; 8:45-48; 8:55-61; 13:31-36; 17:21-23. Because the specification plainly demonstrates that predetermined time  $T_s$  is predetermined with respect to the calculation of the sum ( $T_{max} + T_s$ ), confirmed by the language of the claim itself, the term is not indefinite.

**E. Disputed Claim Term #12: “setting. . .” (’781 Pat. cl. 1) / “a virtual carrier sense unit . . .” (’781 Pat. cl. 16)**

Defendants’ own arguments make plain that they are improperly attempting to rewrite the claims. For example, claim 16 of the ’781 Patent provides: “setting, by said transmit-side STA, the time ( $T_{max}+T_s$ ) *to the paired wireless channel* as a new transmission inhibition time.” The claim as written associates the setting of the transmission inhibition time with *the channel*. However, Defendants incorrectly rewrite the claim so that the setting of the transmission inhibition time is set *for the transmit-side STA* rather than *the channel*. Response at 27.

First, Defendants mischaracterize the problem described in the ’781 specification. Defendants wrongly assert that “the problem is that the transmit-side STA cannot inhibit its own transmission.” Response at 28. To the contrary, the patent describes the problem *with respect to the channel*, stating, “the wireless packet transmitted from the STA 1 at timing  $t_3$  may collide against a wireless packet transmitted *from another STA*.” ’781 Patent at 2:67-3:3. Thus, the problem addressed is not that STA 1 cannot inhibit its own transmissions, but rather that *usage of the channel* is not inhibited, resulting in the collision from the other station.

Dependent claims 12 and 27 do not support Defendants’ arguments, but rather confirm their fallacy. For example, claim 12, which depends from claim 1, adds that a receive-side STA may transmit an ACK packet that causes “updating” by the transmit-side STA of the transmission inhibition time “set *for the paired wireless channel* to the transmission inhibition time *of the paired wireless channel* included in the ACK packet.” ’781 Patent at cl. 12 (emphases added). Thus, what is described here is a process by which STAs, including both the transmit-side and receive-side, may update the inhibition time associated *with the channel*, not merely a specific STA.

**V. CONCLUSION**

For the reasons stated herein, Plaintiffs respectfully ask the Court to adopt the constructions they have proposed and reject Defendants’ proposed constructions.

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**CERTIFICATE OF SERVICE**

I hereby certify that on January 18, 2021, I electronically served the foregoing document  
*via* electronic mail to all counsel of record.

/s/ Steven R. Daniels

Steven R. Daniels