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12 UNITED STATES DISTRICT COURT
13 SOUTHERN DISTRICT OF CALIFORNIA

14 BELL NORTHERN RESEARCH,
15 LLC,

16 Plaintiff,

17 v.

18 COOLPAD TECHNOLOGIES, INC.
19 AND YULONG COMPUTER
20 COMMUNICATIONS,

21 Defendants.

Case No. 3:18-cv-01783-CAB-BLM
[LEAD CASE]

**DEFENDANTS' MEMORANDUM OF
POINTS AND AUTHORITIES IN
SUPPORT OF THEIR JOINT MOTION
FOR SUMMARY JUDGMENT ON
INDEFINITENESS**

Date: June 19, 2019

Courtroom: 4C

Judge: Hon. Cathy A. Bencivengo

**PER CHAMBERS RULES, NO ORAL
ARGUMENT UNLESS ORDERED
SEPARATELY BY THE COURT**

24 BELL NORTHERN RESEARCH,
25 LLC,

26 Plaintiff,

27 v.

28 HUAWEI DEVICE (DONGGUAN)
CO., LTD., HUAWEI DEVICE

Case No. 3:18-cv-01784-CAB-BLM

**DEFENDANTS' MEMORANDUM OF
POINTS AND AUTHORITIES IN
SUPPORT OF THEIR JOINT MOTION
FOR SUMMARY JUDGMENT ON
INDEFINITENESS**

Date: June 19, 2019

Case No. 3:18-cv-1783-CAB-BLM [LEAD CASE]

1 (SHENZHEN) CO., LTD., and	Courtroom: 4C
2 HUAWEI DEVICE USA, INC.,	Judge: Hon. Cathy A. Bencivengo
3 Defendants.	PER CHAMBERS RULES, NO ORAL
4	ARGUMENT UNLESS ORDERED
5	SEPARATELY BY THE COURT
6 BELL NORTHERN RESEARCH,	Case No. 3:18-cv-01785-CAB-BLM
7 LLC,	DEFENDANTS' MEMORANDUM OF
8 Plaintiff,	POINTS AND AUTHORITIES IN
9 v.	SUPPORT OF THEIR JOINT MOTION
10 KYOCERA CORPORATION and	FOR SUMMARY JUDGMENT ON
11 KYOCERA INTERNATIONAL INC.,	INDEFINITENESS
12 Defendants.	Date: June 19, 2019
13	Courtroom: 4C
14	Judge: Hon. Cathy A. Bencivengo
15	PER CHAMBERS RULES, NO ORAL
16	ARGUMENT UNLESS ORDERED
17	SEPARATELY BY THE COURT
18 BELL NORTHERN RESEARCH,	Case No. 3:18-cv-01786-CAB-BLM
19 LLC,	DEFENDANTS' MEMORANDUM OF
20 Plaintiff,	POINTS AND AUTHORITIES IN
21 v.	SUPPORT OF THEIR JOINT MOTION
22 ZTE CORPORATION, ZTE (USA)	FOR SUMMARY JUDGMENT ON
23 INC., ZTE (TX) INC.,	INDEFINITENESS
24 Defendants.	Date: June 19, 2019
25	Courtroom: 4C
26	Judge: Hon. Cathy A. Bencivengo
27	PER CHAMBERS RULES, NO ORAL
28	ARGUMENT UNLESS ORDERED
	SEPARATELY BY THE COURT

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25	<i>UltimatePointer, L.L.C. v. Nintendo Co.</i>	
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1 **I. INTRODUCTION**

2 Defendants hereby file their Joint for Motion Summary Judgment on
3 Indefiniteness pursuant to the Court’s statements made during the April 24, 2019
4 Status Hearing. *See* Ex. A (Apr. 24, 2019 Hr’g Tr.) at 9:9-10:9.

5 **II. LEGAL STANDARD**

6 Under 35 U.S.C. § 112, patent claims must “particularly point[] out and
7 distinctly claim[] the subject matter” regarded as the invention. Claims, viewed in
8 light of the specification and prosecution history, must “inform those skilled in the
9 art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v.*
10 *Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). Claims that do not are indefinite
11 under § 112, rendering them invalid. *Id.* at 2125.

12 **III. ARGUMENT**

13 **A. Goris Patents (U.S. Patent Nos. 7,319,889 and 8,204,554)¹**

- 14 1. “A mobile station, comprising: ... the proximity sensor begins
15 detecting whether an external object is proximate substantially
16 concurrently with the mobile station initiating an outgoing
wireless telephone call or receiving an incoming wireless
telephone call.” (’889 cl. 1)²

17 Under the line of Federal Circuit cases beginning with *IPXL Holdings, L.L.C.*
18 *v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005), claim 1 of the ’889 patent is
19 indefinite because its use of method steps in an apparatus claim makes it unclear
20 whether infringement occurs when a device is manufactured or when a user actually
21 uses it in an infringing manner. *See Mastermine Software, Inc. v. Microsoft Corp.*,
22 874 F.3d 1307, 1313-16 (Fed. Cir. 2017) (reciting relevant case law).

23 Claim 1 of the ’889 patent recites a “mobile station” comprising a proximity
24 sensor, “wherein: ... the proximity sensor begins detecting whether an external

25 _____
26 ¹ Because the Goris patent specifications are the same, for simplicity, citations are
provided only for the earlier-issued ’889 patent.

27 ² The terms referenced herein are identified in the parties’ Joint Claim Construction
28 Chart Worksheet and Hearing Statement Pursuant to P.L.R. 4.2. *BNR v. Huawei*,
3:18-cv-1784, Doc. No. 58-1 (Jt. CC Worksheet) App. A.

1 object is proximate substantially concurrently with the mobile station [performing
2 the method step of] **initiating** an outgoing wireless telephone call or **receiving** an
3 incoming wireless telephone call.” See ’889 (Doc. No. 1-3)³ at claim 1. Because the
4 mobile station requires user action in order to initiate or receive a wireless telephone
5 call, it is unclear whether infringement occurs when one sells a mobile station with a
6 proximity sensor capable of this functionality, or whether infringement occurs when
7 a user of the mobile station initiates or receives an incoming wireless telephone call.
8 As such, claim 1 is indefinite.

9 Although an apparatus claim that describes a **capability** of the apparatus is not
10 prohibited by *IPXL*, see *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816,
11 826-27 (Fed. Cir. 2016), the method step of claim 1 does not describe the mere
12 capability of the mobile station—it describes a step that must be performed by the
13 **user** of the mobile station. The specification is clear that a user must perform the
14 method step of “initiating an outgoing wireless telephone call.” ’889 at 3:33-35
15 (“[F]or an outgoing call, the proximity sensor 140 is activated **by pressing a key on**
16 **the keypad 160 to establish the outgoing call to a third party.**”). Thus, the wherein
17 clause in claim 1 requires the user of the mobile station to take action. See *In re*
18 *Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1318 (Fed. Cir. 2011)
19 (“Katz seeks to distinguish *IPXL* on the ground that the term ‘wherein’ does not
20 signify a method step but instead defines a functional capability. We disagree and
21 uphold the district court’s ruling. Like the language used in the claim at issue in
22 *IPXL* (‘wherein ... the user uses’), the language used in Katz’s claims (‘wherein ...
23 callers digitally enter data’ and ‘wherein ... callers provide ... data’) is directed to
24 user actions, not system capabilities.”); *H-W Tech, L.C. v. Overstock.com, Inc.*, 758
25 F.3d 1329, 1335-36 (Fed. Cir. 2014) (holding indefinite an apparatus claim that

26
27
28 ³ Doc. Nos. referenced herein refer to *BNR v. Huawei*, 3:18-cv-1784 unless
otherwise noted. Pin point cites are made to the ECF generated page numbers.

1 recited method steps of “wherein said user completes a transaction” and “wherein
2 said user selects one of said variety of offers”).

3 Tellingly, claim 1 does recite a “capability” limitation elsewhere—
4 specifically, a “proximity sensor ***adapted to*** generate a signal indicative of proximity
5 of an external object”—but by contrast does not use this “adapted to” language to
6 describe the “mobile station initiating an outgoing wireless telephone call or
7 receiving an incoming wireless telephone call.” *Aventis Pharma S.A. v. Hospira,*
8 *Inc.*, 743 F. Supp. 2d 305, 329 (D. Del. 2010), *aff’d*, 675 F.3d 1324 (Fed. Cir. 2012)
9 (“Had the patentees wished to state that the composition was merely ‘capable of’
10 being formed into a perfusion, they could easily have said so explicitly.”).

11 In short, claim 1 is an apparatus claim with a user-performed method step,
12 leaving the public unclear as to when infringement occurs. It is indefinite.

13 2. “*substantially concurrently*” (’889 *cls.* 1, 8; ’554 *cls.* 7, 13)

14 The term “substantially concurrently” is indefinite because “substantially” is a
15 term of degree for which neither the specification nor the claims provide any
16 objective boundaries. *See, e.g., Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364 (Fed.
17 Cir. 2018) (defining terms such as “minimal” or “substantial” as terms of degree).
18 When using terms of degree, the patent “must provide ‘some standard of measuring
19 that degree’ such that the claim language provides ‘enough certainty to one of skill
20 in the art when read in context of the invention.’” *GE Lighting Solutions, LLC v.*
21 *Lights of Am., Inc.*, 663 F. App’x 938, 940 (Fed. Cir. 2016); *Interval Licensing LLC*
22 *v. AOI, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). This standard for measurement
23 must be in the form of “objective boundaries.” *Id.*

24 Here, nothing in the claim language nor the specification provides any
25 objective boundary for determining the temporal degree allowed for “***substantially***
26 ***concurrent[]***” activation of sensor detection and initiation or receipt of a call.
27 Instead, the only portions of the specification that provide any possible guidance
28 teach that “[i]n response to the acceptance of the incoming call 210 or automatically,

1 the proximity sensor 140 is activated to monitor a proximity 230 to an external
2 object.” ’889 at 3:12-14. Similarly, “for an outgoing call, the proximity sensor 140
3 is activated by pressing a key on the keypad 160 to establish the outgoing call to a
4 third party.” ’889 at 3:33-35.

5 When dealing in terms of degree, the operative question is whether the
6 intrinsic evidence provides skilled artisans with some point of comparison such that
7 they are able to determine the objective boundaries of the term. *See Berkheimer*,
8 881 F.3d at 1364 (finding “minimal redundancy” indefinite because the only
9 examples in the specification included “no redundancy,” giving those skilled in the
10 art no point for comparison and thus no objective boundaries). Like *Berkheimer*,
11 neither the claims nor the specification provide any objective means for comparison
12 between activation that occurs “substantially concurrently” to initiating or receiving
13 a call and activation that does not occur “substantially concurrently” to initiating or
14 receiving a call (*i.e.*, there is no guidance as to how much time may pass between
15 activation and initiating or receiving a call before the two do not occur
16 “substantially concurrently”). As neither the specification nor the claims teach
17 objective boundaries for “substantially concurrently,” the term is indefinite.

18 **B. U.S. Patent No. 7,990,842**

19 1. “a standard wireless networking configuration for an
20 Orthogonal Frequency Division Multiplexing scheme” (cl. 1)

21 Claim 1 comprises an “optimal extended long training sequence” that “is
22 carried by a greater number of subcarriers than *a standard wireless networking*
23 *configuration for an Orthogonal Frequency Division Multiplexing scheme.*” This
24 term’s reliance on a “standard wireless networking configuration” fails as indefinite
25 because there is no explanation as to which configuration is contemplated by this
26 term, leaving a person of skill in the art (POSITA) without reasonable certainty as to
27 its scope.
28

1 The intrinsic evidence does not specify what constitutes a “standard” wireless
2 networking configuration nor provide objective boundaries for determining the
3 scope of this term. The specification does not use the terms “standard wireless
4 networking configuration,” “wireless networking,” or “configuration.” Nor does the
5 specification use the word “standard” in a way that sufficiently clarifies the scope of
6 this term. The word “standard,” as written in claim 1, is an adjective describing the
7 “wireless networking configuration.” Yet the patent nowhere describes what a
8 “standard” wireless networking configuration is. Indeed, elsewhere, the patent only
9 uses the word “standard” as a noun to refer to protocols such as 802.11. This use
10 appears in the specification’s “Description of Related Art,” which includes solely
11 the following references: “a particular wireless communication standard,” “different
12 standards or different variations of the same standard,” “802.11 standard,” “a newer
13 version of the standard,” and “802.11a and 802.11g standards.” ’842 (Doc No. 1-5)
14 at 1:31-2:10. But the patentee did not choose that usage in claim 1. Notably, the
15 patentee knew how to draft claims using the word “standard” as a noun. *See* ’842 at
16 cls. 13, 14, 15 (reciting a “legacy wireless networking protocol standard”). Absent
17 any objective boundaries, this term is indefinite.

18 If the grammar of this term is overlooked and the Court finds the patentee
19 used the word “standard” as a noun, the claim is still indefinite. Because the
20 specification uses the word “standard” in describing the 802.11a, 802.11b, 802.11g,
21 and 802.11n standards (’842 at 1:31-2:10), a POSITA could in theory interpret
22 “standard” as an 802.11 wireless standard issued by the IEEE. Ex. B (Wells Op.
23 Decl.) at ¶¶ 40-42. And, because the standard is “for an [OFDM] scheme,” a
24 POSITA could interpret the standard as limited to 802.11 standards that include
25 OFDM configurations—including, at least, 802.11a, 802.11g, and 802.11n. Ex. B
26 (Wells Op. Decl.) at ¶¶ 43-44. But there’s nothing in the specification to suggest the
27 inventors acted as their own lexicographers and so limited the term. The failure of
28 this term to identify the scope of what qualifies as a “standard” makes the scope

1 ambiguous. *See Nautilus*, 572 U.S. at 910 (stating, a patent must “inform those
2 skilled in the art about the scope of the invention with reasonable certainty”). It
3 remains unclear whether all or just a subset of these standards are claimed and
4 whether other standards are included or not. *See, e.g., Teva Pharm. USA, Inc. v.*
5 *Sandoz, Inc.*, 789 F.3d 1335 (Fed. Cir. 2015) (holding that the term “molecular
6 weight” is indefinite, where it “could refer to any of the three weight measures”).
7 And if all or just a subset could be claimed, there is no clarity as to which standard
8 meets this claim under any given circumstance.

9 BNR’s proposed alternative construction, “a standard issued by a Standard
10 Setting Organization (for example, IEEE or 3GPP) utilizing an [OFDM] scheme,”
11 emphasizes precisely the overbreadth of the claim language. BNR’s construction is
12 so broad it well exceeds the scope of disclosure in the ’842 patent, as it is not limited
13 to any point in time or to the standards recited. Under BNR’s construction, the term
14 apparently could encompass any of the numerous standards that use OFDM in
15 addition to OFDM-based standards issued by many different standard setting
16 organizations. Ex. B (Wells Op. Decl.) at ¶ 50; Ex. C
17 (https://en.wikipedia.org/wiki/IEEE_802.11) (showing sixteen 802.11 OFDM-based
18 standards); Ex. D ([https://en.wikipedia.org/wiki/Orthogonal_frequency-
19 division_multiplexing](https://en.wikipedia.org/wiki/Orthogonal_frequency-division_multiplexing)) (showing at least twenty OFDM-based standards). Further,
20 BNR’s construction would cover future standards not known or contemplated by a
21 POSITA as of the invention date, thus raising written description and enablement
22 issues. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (stating
23 that a term is given the meaning that it would have to a POSITA “at the time of the
24 invention, i.e., as of the effective filing date of the patent application”).

25 BNR attempts to justify this broad reach based on the following statement in
26 the specification: “Different wireless devices in a wireless communication system
27 may be compliant with different standards or different variations of the same
28

1 standard.” Ex. E (Madisetti Op. Decl.) at ¶ 160 (citing ’842 at 1:50-52).⁴ However,
2 that statement does not describe the invention or connect it to the term at issue.

3 Finally, BNR’s proposed construction raises a printed matter doctrine issue,
4 as it attempts to incorporate the actual texts of various standards into the claim in
5 order to decipher, at least, the number of subcarriers. *See, e.g., Praxair Distrib., Inc.*
6 *v. Mallinckrodt Hosp. Prod. IP Ltd.*, 890 F.3d 1024, 1031 (Fed. Cir. 2018) (holding
7 claim limitations directed to printed matter are not entitled to patentable weight
8 unless the printed matter is functionally related to its substrate).

9 2. “extended long training sequence” (cls. 1, 19)

10 The ’842 patent fails to sufficiently inform as to the scope of the term an
11 “extended” long training sequence. The specification does not define or use this
12 term, and the term “extended” appears nowhere in the specification. BNR appears
13 to argue that the key characteristic of the “extended long training sequence” is the
14 number of subcarriers, as BNR offers the following alternative construction for this
15 term: “a training sequence that uses more active subcarriers than an earlier version
16 of the same standard.” Nonetheless, the lack of objective boundaries as to the
17 number of subcarriers sufficient to establish the long training sequence as an
18 “extended” one renders this term indefinite. *Berkheimer*, 881 F.3d at 1364
19 (requiring objective boundaries for terms of degree).

20 Claim 1 states that “a signal generator” generates the “extended long training
21 sequence,” and that it is processed by an “Inverse Fourier Transformer [(IFT)].”
22 ’842 at cl. 1. The specification, however, uses different terms for the output from

23
24 ⁴ Pursuant to the Court’s Consolidation Order dated February 2, 2019 and direction
25 to the parties during the April 26, 2019 Claim Construction Status Hearing,
26 Defendants are filing consolidated Claim Construction and Indefiniteness Briefs.
27 Doc. No. 60; Ex. A at 3; Apr. 26, 2019 Status Hr’g Tr. at 9:9-10:9. Given BNR’s
28 disclosure of Dr. Madisetti’s opinions in a manner directly adverse to ZTE, ZTE
must address BNR’s positions in this consolidated brief. However, ZTE maintains
and does not waive its objections to BNR’s use of Dr. Madisetti for the reasons cited
in its Motion to Strike. *BNR v. ZTE*, 3:18-cv-1786, D.I. 84 (filed May 8, 2019).

1 the signal generator / input to the IFT: “**expanded** long training sequence,”
2 “**inventive** long training sequence,” and “long training sequence.” *See, e.g.*, ’842 at
3 2:47-3:24; 4:4-59. Yet the patent elsewhere suggests that the “extended long
4 training sequence” differs from the “long training sequence.” ’842 at cl. 16. Even
5 looking to those terms, the term is indefinite. For example, the specification states
6 that the “**expanded long training sequence** and the optimal long training sequence
7 **are stored on more than 52 sub-carriers.**” ’842 at Abstract, 2:55-58. This might
8 suggest that a long training sequence is “expanded” if it is on more sub-carriers than
9 a set number. However, that set number changes throughout the specification. *See*
10 ’842 at 2:67-3:3 (“The expanded long training sequence and the optimal expanded
11 long training sequence are stored on more than 56 subcarriers.”), 3:12-15 (“... stored
12 on more than 63 sub-carriers”). In practice, the number of possible subcarriers can
13 vary by orders of magnitude. *See, e.g.*, Ex. B (Wells Op. Decl.) at ¶ 50 (“IEEE
14 802.16 (WiMAX) is an OFDM-based standard issued by IEEE that specifies various
15 subcarrier configurations up to 2,048 subcarriers.”).

16 BNR’s proposed construction does not resolve the indefiniteness problem.
17 BNR’s expert overlooks the patent’s failure to use this term in the specification, and,
18 instead, summarily concludes that “extended” means “longer”—a term that also
19 does not appear in the specification. *See, e.g.*, Ex. E (Madisetti Op. Decl.) at ¶ 170.
20 Not only does BNR’s construction fail to specify (or provide any bounds to) the
21 requisite number of active sub-carriers, but BNR’s construction introduces an
22 additional ground for indefiniteness in referring to an “earlier version of the same
23 standard,” thus expanding the scope of the claim to encompass future standards not
24 described at all in the specification. This phrase does not appear in the patent, and it
25 is impossible to discern what an “earlier version of the same standard” is without
26 knowing what the “same standard” is. *See, e.g.*, Ex. B (Wells Op. Decl.) at ¶ 67.

1 3. “*optimal extended long training sequence*” (cls. 1, 4, 14, 19)

2 Despite claiming an “optimal extended long training sequence,” the ’842
3 patent never uses this term. Moreover, the term employs two “terms of degree”—
4 “optimal” and “extended”—without providing objective boundaries to these terms.
5 See *Berkheimer*, 881 F.3d at 1364. These failings render this term indefinite.

6 According to claim 1, the “extended long training sequence,” discussed
7 above, is processed by “the Inverse Fourier Transformer [(IFT)]” to provide this
8 “optimal extended long training sequence.” ’842 at cl. 1. The patent, however,
9 refers to an “optimal *expanded* long training sequence” as the output of the IFT.
10 See, e.g., *id.* at 2:51-67 (emphasis added). Even looking to this other phrasing, the
11 term is indefinite for the same reasons provided above for the term “extended long
12 training sequence”—*i.e.*, a failure to provide objective boundaries as to the number
13 of subcarriers sufficient to establish the long training sequence as an “extended” one
14 under whatever standard is alleged to infringe. Indeed, BNR’s expert appears to
15 contend that this “optimal” term is merely a variation of the “extended long training
16 sequence” term. See, e.g., Ex. E (Madisetti Op. Decl.) at ¶ 166 (including the
17 “optimal” terms in his consideration of the “extended long training sequence”
18 terms). Further, while the dependent claims should narrow claim 1, they further
19 muddy the waters, as one indicates that the “optimal extended long training
20 sequence is carried by at least 56 active sub-carriers,” while in another it “is carried
21 by at least 63 active sub-carriers.” ’842 at cls. 2, 5. It is insufficient that claim 1
22 indicates that the “optimal extended long training sequence is carried by a greater
23 number of subcarriers than a standard wireless networking configuration for an
24 [OFDM] scheme”—which is itself indefinite, as discussed above—as that provides,
25 at most, an ambiguous lower bound.

26 The word “optimal” is also undefined in the specification. Although BNR’s
27 position is that the optimal sequence has the “minimal peak-to-average ratio,” BNR
28 relies merely on vague discussions in the patent—not on any definitions of what is

1 “optimal.” *See, e.g.*, Ex. F (Madisetti Reb. Decl.) at ¶¶ 114, 116. Moreover, the
2 specification appears to place additional restrictions on this sequence. *See, e.g.*,
3 ’842 at 4:14-18 (stating that the sequence “utilized the same +1 or -1 binary phase
4 shift key (BPSK) encoding for each new sub-carrier” and that “the long training
5 sequence of 802.11a or 802.11g systems is maintained in the present invention”).
6 Further, because claim 1 states that it “provides an *optimal* extended long training
7 sequence *with a minimal peak-to-average ratio*,” BNR’s construction would render
8 the term “optimal” superfluous.

9 4. *“legacy wireless local area network device in accordance with a
10 legacy wireless networking protocol standard” (cl. 14)*

11 Claim 14 states: “The wireless communications device according to claim 1,
12 wherein the optimal extended long training sequence is longer than a long training
13 sequence used by a *legacy wireless local area network device in accordance with a
14 legacy wireless networking protocol standard*.”

15 The specification describes “legacy devices” as “devices that are compliant
16 with older versions” of the 802.11 standard, “[w]hen devices that are compliant with
17 multiple versions of the 802.11 standard are in the same WLAN.” ’842 at 1:62-65.
18 The term “legacy,” therefore, is relative, and has no precise scope without guidance
19 as to the standards-compliance of other devices. *See also* Ex. B (Wells Op. Decl.) at
20 ¶ 55. If devices compliant with 802.11a and 802.11g are in the same WLAN, the
21 802.11a devices would be “legacy”; while, if 802.11g and 802.11n are in the same
22 WLAN, the 802.11g devices would be “legacy.” *Id.*

23 BNR’s proposed alternative construction does not remedy the indefiniteness.
24 BNR proposes “a wireless local area network device using an earlier version of a
25 standard issued by a Standard Setting Organization (SSO) (for example, IEEE or
26 3GPP).” BNR’s use of “earlier version” is no more helpful than the term “legacy”
27 used in the claim, and suffers from the same indefiniteness problem. Ex. B (Wells
28 Op. Decl.) at ¶ 57. Further, BNR’s reliance on “a standard issued by [an SSO]” is not

1 limited to any point in time, is not limited to the standards recited in the '842 patent,
2 and is not limited to the types of standards (IEEE, 802.11) recited in the '842 patent.
3 Ex. B (Wells Op. Decl.) at ¶ 58. BNR does not even acknowledge the description of
4 “legacy devices” in the specification, which is limited to the 802.11 standard.⁵

5 **C. U.S. Patent No. 8,416,862**

6 The '862 patent relates to beamforming in wireless communication systems.⁶
7 '862 (Doc. No. 1-6) at 1:20–22. The specification discloses that a receiving wireless
8 device must provide feedback information “for a transmitter to properly implement
9 beamforming (i.e., determine the beamforming matrix [V]).” *Id.* at 3:14–19.
10 Independent claim 9 and dependent claim 10 recite a wireless communication
11 device that includes “a baseband processing module operable to” send beamforming
12 feedback information to the transmitter.

13 1. “a baseband processing module operable to” (*cl.* 9)

14 a) The “Baseband Processing Module” Term Is A Means-
15 Plus-Function Term.

16 The “baseband processing module” limitation should be construed pursuant to
17 § 112, ¶ 6 because it recites functions without reciting sufficient structure for
18 performing those functions. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348
(Fed. Cir. 2015).

19 The claim recites that the “baseband processing module” is operable to
20 perform five functions, which recite, in part: (1) “receive a preamble sequence,” (2)
21 “estimate a channel response,” (3) “determine an estimated transmitter beamforming
22 unitary matrix (V)” (4) “decompose the estimated transmitter beamforming unitary
23 matrix (V),” and (5) “form a baseband signal.” These functions can be performed
24 by a “baseband processing module” only with specialized programming. Ex. G

25
26 ⁵ Moreover, as written, BNR’s proposed construction is so broad that it is not even
27 limited to **wireless networking** standards—it could encompass any standard issued
28 by an SSO that is used by a wireless device (*e.g.*, USB, HDMI, DDR SDRAM).

⁶ Additional background on “beamforming” is available in Defendants’ Joint
Opening Claim Construction Brief.

1 (Min Op. Decl.) ¶¶ 188-89. The patent confirms that the “baseband processing
2 module” is merely a general purpose processing device that executes software. ’862
3 at 7:56-59, 8:1-9. Because the claimed “baseband processing module” is a general
4 purpose processing device that cannot perform the claimed functions without
5 specialized programming, the claim term does not connote sufficient structure for
6 performing the claimed functions. *See, e.g., GoDaddy.com, LLC v. RPost*
7 *Comme’ns Ltd.*, 2016 WL 212676, at *56 (D. Ariz. Jan. 19, 2016), *aff’d*, 685 F.
8 App’x 992 (Fed. Cir. 2017) (“The Court concludes that [the claimed function] is not
9 a typical function found in a general purpose processor and requires additional
10 programming of the processor to implement. Accordingly, the claimed ‘processor’
11 alone is not sufficient structure.”).

12 Courts routinely construe similar limitations pursuant to § 112, ¶ 6. *See*
13 *GoDaddy.com*, 2016 WL 212676, at *56 (construing “processor for associating”
14 under the second prong of *Williamson* because the claim recited function without
15 reciting sufficient structure for performing that function); *Sarif Biomed. LLC v.*
16 *Brainlab, Inc.*, 2015 WL 5072085, at *6 (D. Del. Aug. 26, 2015) (construing the
17 term “computer adapted to” pursuant to § 112, ¶ 6 because it lacked sufficiently
18 definite structure “as to how the computer would perform the function”); *Guitar*
19 *Apprentice, Inc. v. Ubisoft, Inc.*, 97 F. Supp. 3d 965, 990 (W.D. Tenn. 2015)
20 (“[D]isclosure of a processor and non-transitory processor-readable memory
21 medium in [a claim] does not provide sufficient structure to avoid § 112(f).”);
22 *Personal Audio, LLC v. Apple, Inc.*, No. 9:09-cv-111, 2011 WL 11757163, at *21
23 (E.D. Tex. Jan. 31, 2011) (“If ‘computer’ or ‘processor’ is insufficient structure to
24 define the scope of a means-plus-function limitation, the word ‘processor’ cannot
25 describe sufficient structure when recited directly in a claim limitation itself”);
26 *Soque Holdings (Bermuda) Ltd. v. Keyscan, Inc.*, 2010 WL 2292316, at *12 (N.D.
27 Cal. June 7, 2010) (“[I]f ‘computer’ is insufficient structure for a ‘means’ limitation,
28

1 the naked term ‘computer’ cannot describe sufficient structure when recited directly
2 in the claim limitation.”).

3 BNR’s argument that the claimed “baseband processing module” connotes
4 structure (Ex. E (Madisetti Op. Decl.) at ¶¶ 101-109) ignores the second prong of
5 *Williamson*. Regardless of whether the term “baseband processing module”
6 connotes structure (the first prong of the test), § 112, ¶ 6 applies because a general
7 purpose processor does not by itself denote sufficient structure for performing the
8 claimed functions (the second prong of the test). *Williamson*, 792 F.3d at 1349.

9 Fatally, BNR does not dispute that the claimed “baseband processing module”
10 is a processing device that requires specialized software to perform the claimed
11 functions. Indeed, BNR relies on portions of the specification confirming that the
12 “baseband processing module” executes “operational instructions” (i.e., software) to
13 perform the claimed functions. *See, e.g.*, Ex. E (Madisetti Op. Decl.) at ¶ 101
14 (citing ’862 at 8:1-20 (“Such a processing device may be a microprocessor, . . . or
15 any device that manipulates signals (analog and/or digital) based on operational
16 instructions.”)). Moreover, even if the claimed “baseband processing module” may
17 be implemented as BNR’s expert contends, a POSITA would understand that such
18 off-the-shelf general purpose processing devices could not perform the claimed
19 functions without specialized programming. Ex. H (Min Reb. Decl.) ¶¶ 73, 76-78;
20 *Williamson*, 792 F.3d at 1351 (“[T]he fact that one of skill in the art could program a
21 computer to perform the recited functions cannot create structure where none
22 otherwise is disclosed.”).

23 *b) The Specification Fails To Disclose Sufficient Structure To*
24 *Perform Three Of The Five Claimed Functions.*

25 The parties agree on the five claimed functions. Doc. No. 58-1 at 16-19.
26 Thus, construing the limitation only requires determining “what structure, if any,
27 disclosed in the specification corresponds to the claimed function[s].” *Williamson*,
28 792 F.3d at 1351. In construing a “computer-implemented means-plus-function

1 limitation,” the Federal Circuit “has consistently required that the structure disclosed
2 in the specification be more than simply a general purpose computer or
3 microprocessor.” *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir.
4 2012). The specification must “disclose an algorithm for performing the claimed
5 function.” *Id.* Here, the specification fails to disclose any algorithm for performing
6 the claimed “receive a preamble sequence,” “estimate a channel response,” and
7 “form a baseband signal” functions.

8 (1) “receive a preamble sequence carried by the
9 baseband signal”

10 The ’862 patent fails to disclose an algorithm for the “receive a preamble
11 sequence” function. The specification merely repeats the claimed function without
12 disclosing **how** to perform the function. ’862 at 13:37-40, 14:21-24, Fig. 7 (step
13 702), Fig. 8 (step 802); *see also* Ex. G (Min Op. Decl.) at ¶¶ 193–94. But, “[m]erely
14 restating the function in the specification is insufficient to provide the required
15 algorithm.” *Cloud Farm Assocs. LP v. Volkswagen Grp., Inc.*, 674 F. App’x 1000,
16 1010–11 (Fed. Cir. 2017).

17 BNR contends that the corresponding structure is disclosed in the
18 specification at columns 5:49-6:12, 6:37-7:20; 7:51-9:30; 9:31-13:35; 13:54-15:67
19 and Figures 2-5. *See* Doc. No. 58-1 at 19; Ex. F (Madisetti Reb. Decl.) at ¶¶ 61-63.
20 But the specification does not disclose an algorithm for **how** the “baseband
21 processing module” receives a preamble sequence, and BNR’s expert’s conclusory
22 opinion does not identify an algorithm. “[T]he fact that one of skill in the art could
23 program a computer to perform the recited functions cannot create structure where
24 none otherwise is disclosed.” *Williamson*, 792 F.3d at 1351. Furthermore, BNR’s
25 expert’s identification of certain black box “modules” in Figures 4 and 5 fails to
26 establish structure, because “[s]imply disclosing a black box that performs the
27 recited function is not a sufficient explanation of the algorithm required to render
28

1 the means-plus-function term definite.” *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d
2 1326, 1338 (Fed. Cir. 2014).

3 (2) “estimate a channel response based upon the
4 preamble sequence”

5 The ’862 patent fails to disclose an algorithm for the “estimate a channel
6 response” function. At most, the specification discloses that the function “includes
7 comparing” symbols and that “any of a number of techniques that are known in the
8 art” may be used. ’862 at 13:40-44; *see also* Ex. G (Min Op. Decl.) at ¶¶ 196-97.
9 But, this is not sufficient as it fails to disclose **how** such a comparison results in an
10 estimated channel response or what else must be “included” to perform the
11 estimation.

12 BNR contends that the corresponding structure is disclosed in the
13 specification at columns 5:49-6:12, 6:37-7:20; 7:51-9:30; 9:31-13:35; 13:54-15:67
14 and Figures 2-5. Doc. No. 58-1 at 19; Madisetti Rebuttal ¶ 64. But, the
15 specification does not disclose an algorithm for **how** the “baseband processing
16 module” estimates a channel response. And, other than stating that the algorithm
17 “includes comparing” symbols and that a POSITA would have sufficient
18 knowledge, BNR’s expert fails to explain **how** the “baseband processing module”
19 estimates a channel response based on an algorithm that “includes comparing”
20 symbols. “The indefiniteness inquiry is concerned with whether the bounds of the
21 invention are sufficiently demarcated, not with whether one of ordinary skill in the
22 art may find a way to practice the invention.” *ePlus, Inc. v. Lawson Software, Inc.*,
23 700 F.3d 509, 519 (Fed. Cir. 2012).

24 (3) “form a baseband signal employed by the plurality
25 of RF components to wirelessly send the transmitter
26 beamforming information to the transmitting wireless
27 device”

28 The ’862 patent fails to disclose an algorithm for the “form a baseband
signal” function. The specification merely describes the claimed function without

1 disclosing *how* to perform the function. '862 at 14:4-10, 14:38-43, Fig. 7 (step
2 710), Fig. 8 (step 808); *see also* Ex. G (Min Op. Decl.) at ¶¶ 209-10.

3 BNR contends that the corresponding structure is disclosed in the
4 specification at columns 5:49-6:12, 6:37-7:20; 7:51-9:30; 9:31-13:35; 13:54-15:67
5 and Figures 2-5. Doc. No. 58-1 at 19; Ex. F (Madisetti Reb. Decl.) at ¶ 65. But, the
6 specification does not disclose an algorithm for *how* the “baseband processing
7 module” forms a baseband signal. BNR’s expert points to the functions illustrated
8 in Figure 4 that are purportedly “compliant with various IEEE 802.11 standards”
9 and the “knowledge of a POSITA,” but fails to explain *how* the “baseband
10 processing module” forms a baseband signal. “A patentee cannot avoid providing
11 specificity as to structure simply because someone of ordinary skill in the art would
12 be able to devise a means to perform the claimed function. To allow that form of
13 claiming under section 112, paragraph 6, would allow the patentee to claim all
14 possible means of achieving a function.” *Blackboard, Inc. v. Desire2Learn, Inc.*,
15 574 F.3d 1371, 1385 (Fed. Cir. 2009).

16 Claim 9 and its dependent claims, thus, are invalid as indefinite for three
17 independent reasons: the patent fails to disclose corresponding structure for the (1)
18 “receive a preamble sequence,” (2) “estimate a channel response,” and (3) “form a
19 baseband signal” functions. *See, e.g., Williamson*, 792 F.3d at 1352–53.

20 2. “the baseband processing module is operable to . . .” (cl. 10)

21 For reasons similar to those explained above, claim 10 should be construed
22 under § 112 ¶ 6. The parties agree on the two claimed functions. Doc. No. 58-1 at
23 20-21. Thus, construing the term only requires determining whether the
24 specification discloses an algorithm for performing both functions. It does not.

25 (1) “convert the estimated transmitter beamforming
26 unitary matrix (V) to polar coordinates”

27 The '862 patent fails to disclose an algorithm for the “convert” function. The
28 specification merely repeats the claimed function without disclosing *how* to perform

1 the function. '862 at 13:54-58, Fig. 7 (step 706); *see also* Ex. G (Min Op. Decl.) at
2 ¶¶ 220-21.

3 BNR contends that the corresponding structure is disclosed in the
4 specification at columns 5:49-6:12, 6:37-7:20; 7:51-9:30; 9:31-13:35; 13:54-15:67
5 and Figures 2-5. Doc. No. 58-1 at 21-22; Ex. F (Madisetti Reb. Decl.) at ¶ 69. BNR
6 contends that a POSITA would “know to employ any of the known Cartesian to
7 polar coordinate techniques” to perform the function. But, “[t]he fact that various
8 [Cartesian to polar coordinate conversion] algorithms may have been known to one
9 of ordinary skill in the art does not rescue the claims.” *Triton Tech of Texas, LLC v.*
10 *Nintendo of Am., Inc.*, 753 F.3d 1375, 1379 (Fed. Cir. 2014). The specification does
11 not disclose an algorithm and BNR’s expert failed to explain *how* the “baseband
12 processing module” performs the “convert” function.

13 Because the '862 patent fails to disclose an algorithm for the “convert”
14 function, claim 10 and the claims depending therefrom are invalid for indefiniteness.
15 *See, e.g., Williamson*, 792 F.3d at 1352–53.

16 **D. U.S. Patent No. 6,941,156**

17 The '156 patent is directed to performing an inter-technology handover by
18 “transferring a communication link between two different modes of a multimode
19 cell phone.” '156 at Abstract. In particular, the specification discloses these
20 handovers for “a combination 3-in-1 cell phone/cordless telephone/walkie-talkie
21 device.” '156 at 1:6-10. The only asserted claim of the '156 patent recites both
22 “cell phone functionality” and “RF communication functionality.”

23 *1. “a cell phone functionality” (cl. 1)*

24 The claim term a “cell phone functionality” literally claims *functionality*, the
25 *function* of a cell phone. No other words in the claim recite any structure for this
26 functionality. And the word “functionality” is a nonce word because it “does not
27 provide any indication of structure because it sets forth the same black box
28

1 recitation of structure for providing the same specified function as if the term
2 ‘means’ had been used.” *Williamson*, 792 F.3d at 1351.

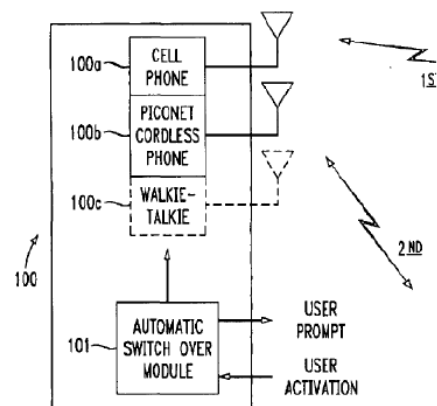
3 A POSITA would understand that the term “cell phone functionality” does
4 not denote a sufficiently definite structure. Ex. G (Min. Op. Decl.) at ¶ 94. The
5 prefix “cell phone” does not impart sufficiently definite structure to the term
6 “functionality.” Ex. G (Min Op. Decl.) at ¶ 95. Further, “cell phone functionality”
7 itself is not described in the specification other than as a black box and the use of its
8 functionality. ’156 at 3:52-63, 7:16-17. The specification’s written description fails
9 to impart any structural significance to the term. While other parts of claim 1
10 describe how such functionality is to be used, e.g. establishing and using
11 communication paths, the claim does not describe how the “cell phone
12 functionality” operates “in a way that might inform the structural character of the
13 limitation-in-question.” *Williamson*, 792 F.3d at 1351; *EON Corp. Holdings LLC v.*
14 *AT & T Mobility, LLC*, 785 F.3d 616, 623 (Fed. Cir. 2015) (finding that means-plus-
15 function limitations serve a public-notice function). It simply is impossible for a
16 potential infringer to discern what structural components are required to infringe this
17 claim and thereby avoid infringement. For this reason alone, the term is a means-
18 plus-function term.

19 Moreover, to the extent that BNR argues that “cell phone functionality” is
20 itself sufficient structure, BNR is wrong. A POSITA would understand that
21 structure to implement a “cell phone,” in the context of the claimed “multimode cell
22 phone,” requires a general purpose computer (e.g., microprocessor). Ex. G (Min
23 Op. Decl.) at ¶¶ 96, 100. But, that is not sufficient structure because “cell phone”
24 functionality cannot be performed by a general purpose computer without
25 specialized programming. *Id.* Thus, the claim term does not connote sufficient
26 structure for performing the “cell phone functionality.” *See, e.g., GoDaddy.com*,
27 2016 WL 212676, at *56 (“The Court concludes that [the claimed function] is not a
28 typical function found in a general purpose processor and requires additional

1 programming of the processor to implement. Accordingly, the claimed ‘processor’
2 alone is not sufficient structure.”). For this additional independent reason, “cell
3 phone functionality” should be construed as a means-plus-function term.

4 The term “cell phone functionality” is
5 indefinite because the specification fails to
6 disclose the required corresponding structure to
7 perform the recited “cell phone” function.

8 *Williamson*, 792 F.3d at 1352. The specification
9 discloses a “cell phone” in black box 100a in
10 Figure 1 (excerpt reproduced to the right), and
11 in the following description: “[i]n particular, as



12 shown in FIG. 1, a multimode cell phone 100 includes multiple functional modes,
13 e.g., a cell phone mode 100a, a piconet cordless telephone 100b, and a walkie-talkie
14 mode 100c. Importantly, an automatic switch over module 101 is in communication
15 with each communication path functionality, e.g., with the cell phone functionality
16 100a, the piconet cordless telephone functionality 100b, and the walkie-talkie
17 functionality 100c. The desired mode of the multimode cell phone 100 may be
18 controlled through suitable communications with each communication path
19 functionality 100a-100c.” ’156 at 3:52-63.

20 The specification contains no description of how cell phone functionality
21 100a operates, provides no algorithms nor details on how to actually communicate
22 using the cell phone functionality. Ex. G (Min Op. Decl.) at ¶¶ 98-102. A failure to
23 disclose an algorithm is fatal for this means-plus-function software term. *Aristocrat*
24 *Techs. Austl. PTY Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1337-38 (Fed. Cir.
25 2008).

26 BNR’s expert admits that a POSITA “would understand that cell phone
27 functionality requires radio communication equipment and a specific *processor*
28 *programmed* in accordance with industry standards.” Ex. F (Madisetti Reb. Decl.)

1 at ¶ 21 (emphasis added). While Dr. Madisetti attempts to contravene the
2 implication of this testimony by asserting that “cellular RF communication
3 functionality [] is well known in the art,” Ex. F (Madisetti Reb. Decl.) at ¶ 22, even
4 assuming this were true, the *specification* must contain *adequate* corresponding
5 structure. *Personal Audio LLC v. Apple, Inc.*, No. 9:09-cv-111, 2011 WL
6 11757163, at *22, (E.D. Tex. Jan. 30, 2011) (citing to *Aristocrat*, 521 F.3d at 1336)
7 (“A processor is not sufficient structure for performing the claimed functions. To
8 construe these terms such that any processor, regardless of how it is programmed,
9 would infringe the claims of the [] patent so long as it performed the functions
10 described would be tantamount to permitting pure functional claiming.”).

11 BNR’s approach has additional problems as well. Under BNR’s broad
12 reading and failure to cabin the understanding of the claim term to a POSITA in the
13 art at the *time of the alleged invention*, (“this is cellular RF communication
14 functionality that *is* well known in the art” (emphasis added) Ex. F (Madisetti Reb.
15 Decl.) at ¶ 17), BNR effectively has claimed *all* cellular standards, even those not
16 yet in existence or even contemplated. Yet, either a general-purpose or a specific
17 processor, according to BNR’s interpretation, would need to be programmed in
18 accordance with an industry standard. *Id.* at ¶ 21. But, BNR has failed to advance
19 even an alternative construction that would limit the claim term to cellular
20 communication technology as of the time of the filing of the invention. The reason
21 is simple: LTE, the technology BNR accuses here, *did not exist* in 2001.

22 For these reasons, cell phone functionality should be construed as a means-
23 plus-function term that is indefinite for failure to disclose adequate corresponding
24 structure.

25 2. “RF communication functionality” (cl. 1)

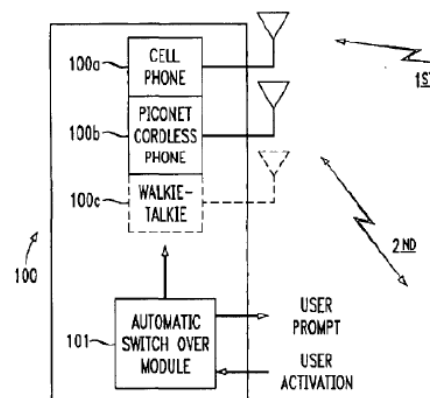
26 Like cell phone functionality, Defendants propose that RF communication
27 functionality is a means-plus-function term and is indefinite for lack of sufficient
28 corresponding structure. Again, the claim term literally claims *functionality*, the

1 **function** of RF communication. And, again, there are no additional words in the
2 claim that recite any additional structure for the RF communication functionality or
3 its function of RF communication. Thus, for this reason alone, “RF communication
4 functionality” is a means-plus-function term. Moreover, to the extent that BNR
5 argues that “RF communication functionality” itself is sufficient structure, once
6 again BNR is incorrect. A POSITA would understand that structure to implement a
7 “RF communication functionality,” in the context of the claimed “multimode cell
8 phone,” includes a general purpose computer (e.g., microprocessor). Ex. G (Min
9 Op. Decl.) at ¶ 106. But, that is not sufficient structure because “RF
10 communication” functionality cannot be performed by a general purpose computer
11 without specialized programming. *Id.* Thus, for this additional independent reason,
12 this is a means-plus-function term because it does not connote sufficient structure
13 for performing the “RF communication functionality.” *See, e.g., GoDaddy.com*,
14 2016 WL 212676, at *56.

15 And, again, the specification does not disclose the required corresponding
16 structure to perform the claimed “RF communication” function. The specification
17 discloses the separate RF communication functionality are the two black boxes 100b
18 and 100c in Figure 1 (excerpt below and to the right).

19 The black boxes 100a-c are described in
20 the specification as cell phone 100a, piconet
21 cordless phone 100b, and walkie-talkie 100c.
22 Cell phone functionality 100a has already
23 been discussed above. Piconet cordless phone
24 100b is described as “using, e.g., a wireless
25 piconet protocol conforming to the
26 BLUETOOTH™ standard.” ’156 at 5:11-15.

27 Walkie-talkie 100c is described as being
28 “digital or analog. One preferred frequency band and protocol is the Family Radio



1 System (FRS) band, having an operable range of over 1 mile.” *Id.* at 7:40-44. But
2 despite this description, the specification fails to disclose structure to perform the
3 claimed function. Even the incorporation of a standard, such as Bluetooth or FRS,
4 into the specification is insufficient. These standards specify what is to be
5 implemented, but not *how* it is to be implemented.

6 But, the specification contains no description of how RF communication
7 functionality 100b or 100c operates, and provides no algorithms nor details for its
8 operation. Ex. G. (Min Op. Decl.) at ¶¶ 108-10. Further, BNR’s expert admits that
9 a “POSITA would understand that an RF communication functionality would utilize
10 hardware and software specifically programmed and implemented for the relevant
11 RF type.” Ex. F (Madisetti Reb. Decl.) at ¶ 26. For the same reasons as described
12 above, the fact that RF communication functionality requires software renders this
13 term indefinite. Software standing alone, with no corresponding algorithm, is not
14 sufficiently definite structure. *Aristocrat*, 521 F.3d at 1337.

15 In a related point, if the Court finds that this term is definite, once again, BNR
16 has failed to advance an alternative construction that would limit the “RF
17 communication functionality” to what was disclosed in the specification, at most
18 Bluetooth and walkie-talkie. ’156 at 5:11-15, 7:40-44.

19 For these reasons, “RF communication functionality” should be construed as
20 a means-plus-function term and indefinite for failure to disclose adequate
21 corresponding structure. Alternatively, to the extent the Court agrees that this term
22 is subject to means-plus-function treatment but not indefinite for lack of adequate
23 corresponding structure, the “RF communication functionality” should be limited to
24 Bluetooth and walkie-talkie and equivalents thereof.

25 3. *“a module to establish simultaneous communication paths from*
26 *said multimode cell phone using both said cell phone*
functionality and said RF communication functionality” (cl. 1)

27 Claim 1 of the ’156 patent includes “a module to establish simultaneous
28 communication paths from said multimode cell phone using both said cell phone

1 functionality and said RF communication functionality” (“establishment module”).
2 As described in Defendants’ Joint Opening Claim Construction Brief, this term is a
3 means-plus-function term under 35 U.S.C. § 112, ¶ 6. *See* Def. Claim Const. Br., §
4 VI.C (concurrently filed). As the establishment module is necessarily understood to
5 be a computer-implemented means-plus-function limitation (*see* Ex. G (Min Op.
6 Decl.) at ¶¶ 115-117), the Federal Circuit requires the specification disclose an
7 algorithm for the function. *See* § III.C.1, *supra*.

8 The specification fails to disclose any algorithm supporting the establishment
9 module. BNR cites to large segments of the specification (“Col. 3:48-4:49; 4:54-
10 5:62; 6:3-55; 6:60-8:5,” constituting over 70% of the detailed description) as
11 purporting to disclose sufficient structure, but provides no further details. *See* Ex. G
12 (Min Op. Decl.) at ¶ 118; Doc. No. 58-1 at 42-45. To the extent that BNR identifies
13 steps 202, 204, 206, and 208, shown in FIG. 2 and the BNR-cited passages of the
14 ’156 patent, these steps fail to disclose an algorithm that “establish[es] simultaneous
15 communication paths from said multimode cell phone using both said cell phone
16 functionality and said RF communication functionality.” Step 202 cannot disclose
17 sufficient structure because “establish[ing a] telephone call with cordless telephone”
18 merely parrots the first part of the claimed function “establish . . . communication
19 paths from said multimode cell phone using . . . RF communication functionality.”
20 *Augme*, 755 F.3d at 1338 (merely “restat[ing] the recited function” is not enough to
21 render the means-plus-function term definite); *see* Ex. G (Min Op. Decl.) at ¶¶ 114,
22 118. Step 204, “determine need to move to cellular call,” fares no better as it
23 expresses what is to be done, rather than disclosing how that determination is made
24 or how to establish a communication path from said multimode phone. *Augme*, 755
25 F.3d at 1338 (“disclos[ing] inputs to and outputs from . . . but [not including] any
26 algorithm for how Simply disclosing a black box that performs the recited
27 function is not a sufficient explanation of the algorithm required to render the
28

1 means-plus-function term definite.”); *see also ePlus*, 700 F.3d at 518; *see* Ex. G
2 (Min Op. Decl.) at ¶ 119.

3 Furthermore, steps 206 and 208 do not recite functionality performed by the
4 multimode phone, but instead attempt to incorporate functionality performed by the
5 public switched telephone network (PSTN). *See* Ex. G (Min Op. Decl.) at ¶¶ 120-
6 121. Step 206 indicates that “the telephone number of the far end telephone 150 (or
7 another suitable phone accessible to the far end party) is determined.” ’156 at 4:59-
8 61. There is no disclosure as to how the telephone number is determined by the
9 multimode phone, but only that the number may be determined “using a call related
10 information service . . . provided by the PSTN.” *Id.* at 4:61-63; *see* Ex. G (Min Op.
11 Decl.) at ¶ 120. Step 208 also recites functionality provided by the PSTN or another
12 third party service such as “Call Waiting.” *See, e.g.,* ’156 at 4:64-67 (“the
13 determined telephone number of the far end telephone 150 is dialed, and passes
14 through to the far end telephone 150 using, e.g., a Call Waiting type service 140.”);
15 *see* Ex. G (Min Op. Decl.) at ¶ 121.

16 4. *“an automatic switch over module, in communication with both*
17 *said cell phone functionality and said RF communication*
18 *functionality, operable to switch a communication path*
19 *established on one of said cell phone functionality and said RF*
communication functionality, with another communication path
later established on the other of said cell phone functionality and
said RF communication functionality” (cl. 1)

20 Claim 1 of the ’156 patent includes “an automatic switch over module, in
21 communication with both said cell phone functionality and said RF communication
22 functionality, operable to switch a communication path established on one of said
23 cell phone functionality and said RF communication functionality, with another
24 communication path later established on the other of said cell phone functionality
25 and said RF communication functionality” (“automatic switch over module”). As
26 described in Defendants’ Joint Opening Claim Construction Brief, this term is
27 subject to means-plus-function treatment. *See* Def. Claim Const. Br., § VI.D. For
28 the same reasons as discussed above with respect to the establishment module, the

1 automatic switch over module is a computer-implemented means-plus-function
2 limitation without sufficient structure. *See* Ex. G (Min Op. Decl.) at ¶¶ 127-129.

3 BNR's specification citations provide little guidance. *See* Ex. G (Min Op.
4 Decl.) at ¶ 130; Doc. No. 58-1 at 45-49. To the extent that BNR identifies steps 210
5 and 212 (shown in FIG. 2 and the BNR -cited passages of the '156 patent) as the
6 requisite structure, these steps fail to disclose an algorithm for the automatic switch
7 over module. Step 210 describes functionality performed by the user of the far end
8 phone, not the multimode cell phone. *See, e.g.*, '156 at 5:1-2 ("the user of the far
9 end telephone 150 accepts the newly incoming telephone call."); *see* Ex. G (Min Op.
10 Decl.) at ¶ 130. Step 212 describes a desired result—"the old communication path
11 (in this case the cordless telephone call) is dropped."—without disclosing how the
12 result is achieved. '156 at 5:4-5; *see* Ex. G (Min Op. Decl.) at ¶ 131.

13 Accordingly, this term is indefinite because nothing in the '156 patent
14 specification discloses the requisite structure for "an automatic switch over module,
15 in communication with both said cell phone functionality and said RF
16 communication functionality, operable to switch a communication path established
17 on one of said cell phone functionality and said RF communication functionality,
18 with another communication path later established on the other of said cell phone
19 functionality and said RF communication functionality."

20 **IV. CONCLUSION**

21 Based on the foregoing, Defendants respectfully request the Court hold the
22 challenged terms indefinite.
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FILER’S ATTESTATION

Pursuant to Section 2(f)(2) of the Electronic Case Filing Administrative Policies and Procedures of the United States District Court of the Southern District of California, I certify that authorization for the filing of this document has been obtained from each of the other signatories shown above and that all signatories have authorized placement of their electronic signature on this document.

Dated May 24, 2019.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on May 24, 2019 to all counsel of record who are deemed to have consented to electronic service via the Court’s CM/ECF system per Civil Local Rule 5.4. Any other counsel of record will be served by electronic mail, facsimile and/or overnight delivery.

Executed on May 24, 2019 at San Diego, California.

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