

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

CELLULAR COMMUNICATIONS EQUIPMENT LLC,	§	
	§	
Plaintiff,	§	CASE NO. 6:16-CV-475-KNM
	§	
v.	§	Consolidated Lead Case
	§	
HTC CORPORATION, et al.,	§	
	§	
Defendants.	§	
	§	

MEMORANDUM OPINION AND ORDER

This Memorandum Opinion construes the disputed claim terms in United States Patent Nos. 8,385,966 (“the ’966 Patent”) and 9,037,129 (“the ’129 Patent”) asserted in this suit by Plaintiff Cellular Communications Equipment LLC (“CCE”) against Defendants HTC Corporation, HTC America, Inc., and ZTE (USA), Inc. (collectively, “Defendants”).

On September 14, 2017, the parties presented oral arguments on the disputed claim terms at a *Markman* hearing. For the reasons stated herein, the court **ADOPTS** the constructions set forth below.

BACKGROUND

Plaintiff CCE asserts four patents in the present case, United States Patent Nos. 7,941,174, 8,055,820, 8,385,966, and 9,037,129 (collectively, the “patents-in-suit”). The patents-in-suit relate to cellular networks. This claim construction involves only the ’966 Patent and the ’129 Patent.

The Court previously construed the ’966 Patent in *Cellular Communications Equipment LLC v. LG Electronics, Inc., et al.*, No. 6:14-CV-982, Doc. No. 206 (E.D. Tex. May 13, 2016)

(“LG” or “the ’982 Markman Order”).¹ The ’982 Markman Order also construed United States Patent No. 8,868,060 (“the ’060 Patent”), and the ’129 Patent is a child of the ’060 Patent. Shortly after the Court issued the ’982 Markman Order, the case settled. *See Cellular Communications Equipment LLC v. LG Electronics, Inc., et al.*, No. 6:14-CV-982, Doc. No. 216 (E.D. Tex. Aug. 8, 2016).²

APPLICABLE LAW

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. Courts give claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent as a whole. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language provides substantial guidance in the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and un-asserted, can provide additional instruction

¹ The parties relied on and incorporated-by-reference arguments presented in prior claim construction proceedings. *See* Doc. No. 115 at 2.

² Other prior claim construction proceedings involving the patents-in-suit include: *Cellular Communications Equipment LLC v. HTC Corp*, No. 6:13-CV-507, Doc. No. 363 (E.D. Tex. Mar. 9, 2015), and Doc. No. 413 (June 1, 2015); *Cellular Communications Equipment LLC v. Samsung Electronics Co., Ltd.*, No. 6:14-CV-759, Doc. No. 206 (E.D. Tex. Mar. 29, 2016); and *Cellular Communications Equipment LLC v. Apple, Inc.*, No. 6:14-CV-251, Doc. No. 254 (E.D. Tex. Sept. 10, 2016).

because “terms are normally used consistently throughout the patent.” *Id.* The differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *see also Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than the ordinary meaning of the term, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. While the Court generally presumes terms possess their ordinary meaning, statements of clear disclaimer can overcome this presumption. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). Further, this presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v.*

Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not

be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

ANALYSIS

I. Disputed Terms in the '966 Patent³

The '966 Patent, titled “Method, Apparatus and Computer Program for Power Control Related to Random Access Procedures,” issued on February 26, 2013, and bears an earliest priority date of May 5, 2008. The Abstract states:

A first power control adjustment state $g(i)$ and a second power control adjustment state $f(i)$ are initialized for $i=0$ to each reflect an open loop power control error. An initial transmit power for a shared uplink channel is computed using full pathloss compensation. The computed initial transmit power depends on a preamble power of a first message sent on an access channel, and the initial transmit power is initialized with the second power control adjustment state $f(0)$. A third message is sent from a transmitter on an uplink shared channel at the initial transmit power. In various implementations, the power for $i=0$ on the uplink control channel is also initialized similar to the initial transmit power for the third message and using full pathloss compensation, and after the third message (and retransmissions of it), subsequent messages sent on the uplink shared channel are sent at a power that is computed using fractional pathloss compensation.

³ The parties originally submitted the terms “specific for a user equipment executing the method” and “ $P_{0_UE_PUCCH}$ is a power control constant for the uplink control channel that is specific for a user equipment executing the method” for construction. During the *Markman* hearing, the parties agreed that these terms are no longer in dispute. *See* Hearing Recording at 9:39 AM.

- a. **“preamble power” (Claims 1, 2, 5, and 9–11) / “wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$ ” (Claims 1, 9, and 10)**

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
preamble power	No construction necessary.	“a transmit power of a preamble sent on an access channel”
wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$	No construction necessary.	“wherein the initial transmit power takes into account both the preamble power and the second power control adjustment state $f(0)$ ”

The underlying disputes here are: (1) whether a preamble power must necessarily be a transmit power; and (2) whether the initial transmit power depends on both the preamble power and the second power control adjustment state $f(0)$.

Plaintiff argues that the claim language is not unclear. Doc. No. 116 at 5. Plaintiff contends that Defendants’ proposal of “takes into account” does not clarify the term and instead “invites unintended consequences.” *Id.* at 6. Plaintiff also argues that with respect to “preamble power,” the patentee knew how to claim a “transmit power” but chose not to. *Id.* at 7. Further, Plaintiff argues that Defendants’ deletion of the phrase “of a first message” “undermines antecedent basis for subsequent references to ‘the first mesasge [*sic*, message]’ in dependent claims.” *Id.*

Defendants contend that their proposed construction “is fully consistent with the claim language and the specification.” Doc. No. 120 at 8.

Plaintiff replies that it has never argued that: “the plain meaning of the term allows

‘consideration of either value, but not both.’ The meaning of ‘depends on’ is straightforward and requires no construction.” Doc. No. 121 at 1. With respect to “preamble power,” Plaintiff contends that “[e]ven if [Defendants’] construction were consistent with the claims, that is not a reason to limit the scope of ‘preamble power.’” *Id.* Plaintiff argues that there is nothing in the independent claims that limits what type of preamble power is implicated. *Id.* at 2.

In *LG*, the parties originally presented these terms for construction but then agreed that no construction was necessary. *See* ’982 Markman Order at 6 n. 1.

Claim 1 of the ’966 Patent recites:

1. A method comprising:

using a processor to initialize for $i=0$ a first power control adjustment state $g(i)$ for an uplink control channel and a second power control adjustment state $f(i)$ for an uplink shared channel to each reflect an open loop power control error;

using the processor to compute an initial transmit power for the uplink shared channel using full path loss compensation, *wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$* ; and

sending from a transmitter a third message on the uplink shared channel at the initial transmit power;

wherein the second power control adjustment state $f(i)$ for $i=0$ is initialized as:

$$P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup};$$

in which:

$P_{0_UE_PUSCH}$ is a power control constant for the uplink shared channel that is specific for a user equipment executing the method;

ΔP_{rampup} is a ramp-up power for preamble transmissions; and

ΔP_{PC} is a power control command indicated in a second message that is received in response to sending the first message.

This claim expressly recites “an initial *transmit* power for the uplink shared channel” but does not use the word “transmit” in conjunction with the “preamble power.”

Nonetheless, this “initial transmit power” depends in part upon the preamble power, which implies that the preamble power is also a transmit power. Further, the claim recites that “ ΔP_{rampup} is a ramp-up power for preamble *transmissions*,” which is consistent with Defendants’ proposal that the “preamble power” is a “transmit power.” Claims 9 and 10 of the

'966 Patent also recite this limitation. Further, the specification refers to $P_{preamble}$ in the context of “the UE’s [(user equipment’s)] *transmission* . . .” ’966 Patent at 6:18–19 (emphasis added); *see id.* at 2:37–3:10. On balance, Plaintiff has not persuasively shown how the “preamble power” could be anything other than a “transmit” power.

Moreover, the specification refers to:

[U]sing the processor to compute an initial transmit power for the uplink shared channel using full pathloss compensation, wherein the initial transmit power depends on a preamble power of a first message sent on an access channel, *and* is initialized with the second power control adjustment state $f(0)$.

Id. at 3:22–25 (emphasis added); *see id.* at 11:27–29.

Thus, the specification is consistent with Defendants’ proposal that the recital of “depends on” in the “initial transmit power” term refers to *both* a “preamble power of a first message sent on an access channel” *and* “the second power control adjustment state $f(0)$.” Plaintiff’s reply brief agrees with this interpretation. Doc. No. 121 at 1 (“[Plaintiff] has never contended that the plain meaning of the term allows ‘consideration of either value, but not both.’”).⁴

Additionally, during the *Markman* hearing, Defendants conceded that its proposal of “sent on an access channel” in its proposed construction for “preamble power” is redundant, as this limitation is already expressly recited in the claim and thus does not need to be included in the construction of “preamble power.” *See Markman* hearing recording at 9:19 AM.

Therefore, the Court construes the disputed terms as follows:

⁴ During the *Markman* hearing, Plaintiff also expressed concern with Defendants’ proposal of “takes into account” in their proposed construction for the “wherein the initial transmit power . . .” term because in *LG*, those defendants argued that “takes into account” permits only direct dependency and excludes indirect dependencies. *See Markman* hearing recording at 9:10 AM. Defendants responded that their proposal of “takes into account” allows for both direct and indirect dependencies. *See Markman* hearing recording at 9:22 AM. Nonetheless, Defendants’ proposal of “takes into account” is unclear and would tend to confuse rather than clarify the scope of the claims.

“preamble power” means “a transmit power of a preamble”

“wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$ ”

means “wherein the initial transmit power depends on both: (1) a preamble power of a first message sent on an access channel; and (2) the second power control adjustment state $f(0)$.”

- b. “wherein the first power control adjustment state $g(i)$ for $i=0$ is initialized as: $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ” (Claims 3 and 12) / “wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is initialized as: $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ” (Claims 1, 9, and 10)

Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
wherein the first power control adjustment state $g(i)$ for $i=0$ is initialized as: $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$	“wherein the first power control adjustment state $g(i)$ for $i=0$ is set such that $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”	“wherein the first power control adjustment state $g(i)$ for $i=0$ is calculated such that $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”
wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is initialized as: $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$	“wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is set such that $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”	“wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is calculated such that $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”

The underlying dispute is whether “initialize” requires computation. Plaintiff states that “initialize” has a well-understood ordinary meaning: to “set to a starting position or value.” Doc. No. 116 at 8. Plaintiff contends that this meaning is broader than Defendants’ proposal of “calculated.” *Id.* at 9. Plaintiff further argues that its proposal of ‘so that’ clarifies “the power control state is set in a way designed to satisfy the relationship.” *Id.*

Defendants propose the Court’s previous construction in *LG*. Doc. No. 120 at 6. Defendants submit that “the Court made clear [in *LG*] that [the] problem with [Plaintiff’s] construction lies

with the word ‘set,’ which would broadly (and wrongly) encompass initialization without any calculation at all.” *Id.* at 8.

Plaintiff replies that it is not barred from proposing modified constructions because *LG* was settled prior to judgment. Doc. No. 121 at 2. Plaintiff argues that “[s]etting a value so that it satisfies a particular relationship necessarily involves a computation of some sort, whether it is first computing a sum of two values and then setting the value to the sum or first setting the value and then comparing it to the sum of two values to determine whether the two are equal.” *Id.*

Ultimately, Plaintiff has not shown that the Court erred in *LG* nor has Plaintiff otherwise demonstrated that modification of the *LG* constructions is necessary.⁵

Thus, the Court construes the disputed terms as follows:

“wherein the first power control adjustment state $g(i)$ for $i=0$ is initialized as: $P_{0_UE_PUSCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ” means “wherein the first power control adjustment state $g(i)$ for $i=0$ is calculated such that $P_{0_UE_PUSCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$.”

“wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is initialized as: $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ” means “wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is calculated such that $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$.”

⁵ In general, prior claim construction proceedings involving the same patents-in-suit are “entitled to reasoned deference under the broad principles of *stare decisis* and the goals articulated by the Supreme Court in *Markman*, even though *stare decisis* may not be applicable *per se*.” *Maurice Mitchell Innovations, LP v. Intel Corp.*, No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006); see *TQP Development, LLC v. Intuit Inc.*, No. 2:12-CV-180, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J., sitting by designation) (“[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so.”); see also *Teva Pharm. USA, Inc. v. Sandoz, Inc.* 135 S. Ct. 831, 839–40 (2015) (“prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority”) (citation omitted); *Finisar Corp. v. DirectTV Grp., Inc.*, 523 F.3d 1323, 1329 (Fed. Cir. 2008) (noting “the importance of uniformity in the treatment of a given patent”) (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996)).

- c. **“the processor is configured with the memory and the computer program to cause the apparatus to . . . compile a third message to be sent on the uplink shared channel at the initial transmit power” (Claim 10)**

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>This is not a means-plus-function limitation.</p> <p>Not indefinite.</p> <p>To the extent the Court determines this is a means-plus-function limitation:</p> <p>Function: “compile a third message to be sent on the uplink shared channel at the initial transmit power”</p> <p>Structure: “processor configured to execute a computer program stored in memory”</p>	<p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Indefinite.</p> <p>Function: “compile a third message to be sent on the uplink shared channel at the initial transmit power”</p> <p>Structure: no corresponding structure disclosed</p>

The underlying dispute is whether the disputed term is an indefinite means-plus-function term. First, Plaintiff argues that “processor” is not a “nonce” term because “the claim does not merely claim ‘a processor for’ performing some function; it claims a processor configured with memory and a computer program to cause the claimed apparatus to operate in a particular way.” Doc. No. 116 at 11.

Defendants argue that the limitation does not recite sufficiently definite structure for performing the claimed function and is thus a means-plus-function limitation. Doc. No. 120 at 11. Defendants argue that “unlike the other claimed functions, claim 10 does not set forth sufficient detail about the operation of the processor with respect to the ‘compiling a third message’ function that would connote sufficiently definite structure to one of skill in the art.” *Id.* Defendants also note that Plaintiff relies on “the claim language’s recitation of the typical physical structure that implements software without even attempting to identify an algorithm or any other structure in the specification that performs the claimed ‘compiling’ function.” *Id.* at 16.

Plaintiff replies that “‘a structural definition’ for the claimed ‘processor’ is both (1) ‘provided in the specification’ and (2) ‘generally known in the art.’” Doc. No. 121 at 3 (quoting *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1299 (Fed. Cir. 2014)) (footnote omitted). Plaintiff emphasizes that Defendants did not assert 35 U.S.C. § 112, ¶ 6 in its petition for *Inter Partes* Review of the ’966 Patent for the disputed term. Doc. No. 116, Ex. C at 10-13. Plaintiff also alternatively argues that “[t]he specification provides a plethora of disclosure that provides ‘an outline of an algorithm’ or ‘a flowchart’ for the claimed functionality.” Doc. No. 121 at 6.

Claim 10 of the ’966 Patent recites (emphasis added):

10. An apparatus comprising:

a processor;

and a memory storing a computer program;

in which *the processor is configured with the memory and the computer program to cause apparatus to:*

initialize for $i=0$ a first power control adjustment state $g(i)$ for an uplink control channel and a second accumulation power control adjustment state $f(i)$ for an uplink shared channel to each reflect an open loop power control error, and

compute an initial transmit power for the uplink shared channel using full path loss compensation, wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$; and

compile a third message to be sent on the uplink shared channel at the initial transmit power;

wherein the second power control adjustment state $f(i)$ for $i=0$ is initialized as:

$$P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup};$$

in which:

$P_{0_UE_PUSCH}$ is a power control constant for the uplink shared channel that is specific for a user equipment;

ΔP_{rampup} is a ramp-up power for preamble transmissions; and

ΔP_{PC} is a power control command indicated in a second message received at a receiver of the apparatus in response to the transmitter sending the first message.

Title 35 U.S.C. § 112(f) (previously § 112, ¶ 6) provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Ultimately, “the failure to use the word ‘means’ . . . creates a rebuttable presumption . . . that § 112, para. 6 does not apply.” *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (citations and internal quotation marks omitted). “When a claim term lacks the word ‘means,’ the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.* at 1349 (citations and internal quotation marks omitted).

Defendants argue that “claim 10 does not set forth sufficient detail about the operation of the processor . . .” Doc. No. 120 at 11. Defendants then argue that “because the specification does not disclose an algorithm for performing the claimed function, the limitation is indefinite.” Doc. No. 120 at 16.

Defendants cite *St. Isadore Research, LLC v. Comerica Inc.* where the Court found certain “processor” terms to be means-plus-function terms. No. 2:15-CV-1390, 2016 WL 4988246, at *14 (E.D. Tex. Sept. 19, 2016). Defendants also rely on *Personal Audio, LLC v. Apple, Inc.* to indicate that the Court previously held that certain claims reciting a ‘processor’ did not connote sufficient structure to avoid invoking § 112, ¶ 6. No. 9:09-CV-111, 2011 WL 11757163, at *22 (E.D. Tex. Jan. 30, 2011) (discussing *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1333 (Fed. Cir. 2008)).

Since *Personal Audio*, the Federal Circuit has further clarified *Aristocrat*. See *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), *abrogated on other grounds by Williamson*, 792 F.3d 1339. In *Apple*, the Federal Circuit held that *Aristocrat* applies only after § 112, ¶ 6 is invoked. *Id.* In other words, *Aristocrat* does not apply when determining whether § 112, ¶ 6 is invoked. *Id.* at 1298 (“[W]here a claim is not drafted in means-plus-function format, the reasoning in the

Aristocrat line of cases does not automatically apply, and an algorithm is therefore not necessarily required.”); *see Syncpoint Imaging, LLC v. Nintendo of America Inc.*, No. 2:15-CV-247, 2016 WL 55118, at *18–*21 (E.D. Tex. Jan. 5, 2016) (analyzing a “processor” term in light of *Personal Audio, Aristocrat, Williamson, Apple*, and others).

Here, Defendants conflate the principles of the § 112, ¶ 6 corresponding structure analysis with the threshold question of the applicability of § 112, ¶ 6. *See id.* at 1296–98 (finding that the overall means-plus-function analysis involves two “distinct” inquiries, where the claim limitation must first be construed to decide if it connotes “sufficiently definite structure” to a person of ordinary skill in the art; the specification will be reviewed for “corresponding structure” analysis only if the claim limitation is found to be in means-plus-function format.)

Claim 10 recites “the processor is configured with the memory and the computer program to cause apparatus to . . .,” which lends structural character to ‘processor’ through its interactions with other components of the system. *See Finjan, Inc., v. Proofpoint, Inc.*, No. 13-CV-5808, 2015 WL 7770208, at *11 (N.D. Cal. Dec. 3, 2015). The structural nature of this claim language is reinforced by disclosure in the specification:

The UE 10 includes a data processor (DP) 10A, a memory (MEM) 10B that stores a program (PROG) 10C, and a suitable radio frequency (RF) transceiver 10D for bidirectional wireless communications with the eNB 12, which also includes a DP 12A, a MEM 12B that stores a PROG 12C, and a suitable RF transceiver 12D.

’966 Patent at 9:8–13 & Fig. 2; *see Williamson*, 792 F.3d at 1351.

On balance, the disputed claim term sets forth sufficient structure as to the “processor.” *See Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320 (Fed. Cir. 2004) (“when the structure-connoting term ‘circuit’ is coupled with a description of the circuit’s operation, sufficient structural meaning generally will be conveyed to persons of ordinary skill in the art, and § 112 ¶ 6 will not apply”); *see also Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir.

2003) (“While we do not find it necessary to hold that the term ‘circuit’ by itself always connotes sufficient structure, the term ‘circuit’ with an appropriate identifier such as ‘interface,’ ‘programming’ and ‘logic,’ certainly identified some structural meaning to one of ordinary skill in the art.”); *Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 705 (Fed. Cir. 1998); *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996); *Affymetrix, Inc. v. Hyseq, Inc.*, 132 F. Supp. 2d 1212, 1232 (N.D. Cal. 2001).

Moreover, extrinsic evidence also reinforces that the disputed “processor . . .” term is not a nonce term. *See* Doc. No. 116, Ex. F, *Hargrave’s Communications Dictionary* 410 (“In a computer, the functional unit that interprets and executes instructions. A processor consists of at least an instruction control unit and an arithmetic unit.”); *see also id.*, Ex. G, *McGraw-Hill Dictionary of Scientific & Technical Terms* 1676 (6th ed. 2003) (“A device that performs one or many functions, usually a central processing unit. Also known as engine.”); Doc. No. 121, Ex. N, Aug. 15, 2017 Royer Decl. at ¶¶ 33–34; *Linear*, 379 F.3d at 1320; *Greenberg, M.D. v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996); and *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). In light of the extrinsic evidence and case law, the opinions of Defendants’ expert as to the applicability of 35 U.S.C. § 112, ¶ 6 are unpersuasive. *See* Doc. No. 120, Ex. 7, Aug. 8, 2017 Heegard Decl. at ¶¶ 24–31.

Defendants have failed to overcome the presumption against means-plus-function treatment for these non-means terms. Thus, Defendants’ corresponding indefiniteness argument fails. No further construction is necessary. *See, e.g., U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in

redundancy.”); *see also* *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *ActiveVideo Networks, Inc. v. Verizon Commcn’s, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015).

Thus, the Court construes the disputed term **“the processor is configured with the memory and the computer program to cause the apparatus to . . . compile a third message to be sent on the uplink shared channel at the initial transmit power”** to have its **plain meaning**. No further construction is necessary, and Defendants’ indefiniteness argument is hereby rejected.

d. “offset from the preamble power” (Claim 5)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Not indefinite.	Indefinite.

The underlying dispute is whether “the preamble power” is indefinite based on a lack of antecedent basis. Plaintiff argues that “‘the preamble power’ refers to the previously-claimed ‘preamble power of a first message’ . . . because the claim does not describe any other preamble power.” Doc. No. 116 at 17.

Defendants argue that this term is indefinite because “one of ordinary skill in the art would not understand with reasonable certainty what ‘preamble power’ is being referenced by that phrase.” Doc. No. 120 at 17. Defendants contend that the “‘offset from the preamble power’ limitation potentially could refer to the measured preamble power of the first message, or it could

refer to some other preamble power value as described in the specification in the context of Equation 5.” *Id.* at 19–20. Defendants argue that this ambiguity renders the claim indefinite. *Id.*

Plaintiff replies that Defendants’ unsupported attorney argument about ambiguity does not meet their burden of proving indefiniteness by clear and convincing evidence. Doc. No. 121 at 7.

Claim 5 of the ’966 Patent recites (emphasis added):

5. The method according to claim 1,
wherein the initial transmit power P_{Msg3} of the third message for $i=0$ is equal to:

$$P_{Msg3} = \min\{P_{max}, P_{preamble} + \Delta_{0,preamble_Msg3} + \Delta_{PC_Msg3} + 10 \log_{10}(M_{PUSCH}(i)) + \Delta_{TF}(TF(i))\};$$

in which:

P_{MAX} is a maximum allowed transmission power;

$P_{preamble}$ is the preamble power of the first message;

$M_{PUSCH}(i)$ is determined from an uplink resource allocation of a second message received in response to sending the first message;

$\Delta_{TF}(TF(i))$ is calculated from received signaling;

Δ_{PC_Msg3} is indicated by a power control command received at the receiver;

and

$\Delta_{0,preamble_Msg3}$ is an offset from the preamble power.

Defendants emphasize that Claim 5 expressly defines the preamble power of the first message as the variable $P_{preamble}$. Doc. No. 120 at 18. Defendants contend that:

[i]f ‘an offset from the preamble power’ was meant to refer to the preamble power of the first message, one of skill in the art would have expected the claimed definition to either utilize that variable (i.e., $\Delta_{0,preamble_Msg3}$ is an offset from $P_{preamble}$), or to use the same modifier used throughout the claims (i.e., $\Delta_{0,preamble_Msg3}$ is an offset from the preamble power of the first message).

Id.

On balance, the recital of “the preamble power’ in the last limitation of Claim 5 has explicit antecedent basis in prior recitals of “the preamble power of the first message” in Claim 5 and “a preamble power of a first message” in Claim 1, from which Claim 5 depends.

Alternatively, the prior recitals of “the preamble power of the first message” in Claim 5 and “a preamble power of a first message” in Claim 1 provide implicit antecedent basis. *See*

Energizer Holdings Inc. v. Int'l Trade Comm'n, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (holding that “an anode gel comprised of zinc as the active anode component” provided implicit antecedent basis for “said zinc anode”); *see also Cross. Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1319 (Fed. Cir. 2005); *Ex Parte Porter*, 25 U.S.P.Q. 2d (BNA) 1144, 1145 (B.P.A.I. 1992) (“The term ‘the controlled fluid’ . . . finds reasonable antecedent basis in the previously recited ‘controlled stream of fluid’”).

Defendants point to language in the specification that $\Delta_{0,preamble_Msg3}$ may be a fixed value rather than a measured value. *See* '966 Patent at 8:7–62 (“The term $\Delta_{0,preamble_Msg3}$ can be a parameter broadcast in System Information or it could be specified in the appropriate wireless standard governing RACH procedures and pre-stored in the UE’s memory.”). However, Defendants have not established any inconsistency between referring to a measured preamble power and having a predetermined offset from the measured preamble power. *See* Doc. No. 120 at 18–19.

Accordingly, **the antecedent basis for “offset from the preamble power” is “the preamble power of the first message.”** No further construction is necessary, and Defendants’ indefiniteness argument is hereby rejected.

II. Disputed Terms in the ‘129 Patent

The '129 Patent, titled “Method, Network and Device for Information Provision by Using Paging and Cell Broadcast Services,” issued on May 19, 2015, and bears an earliest priority date of April 2, 2007. The Abstract states:

This invention relates to a method, terminal and network or entity wherein a broadcast service is used for informing a number of users on an emergency or other situation of public interest. A specific identifier is used in a paging message for activating broadcast service in the terminals. A terminal checks a received paging message with regard to the presence of the specific identifier and when detecting the specific identifier, switches to a broadcast mode for receiving broadcast content.

The received broadcast emergency content is notified and/or displayed to the users of the terminals.

a. “specific identifier” (Claims 1, 7, and 13)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“a value used to indicate the availability of broadcast information concerning an emergency or other situation of public interest”	No construction necessary. Alternatively, “identifier for indicating an emergency situation”

The underlying dispute here is whether a “specific identifier” is confined to emergency situations. Plaintiff argues that throughout the specification, a specific identifier is a value used to “indicate the availability of broadcast information concerning an emergency situation *or* other situation of public interest.” Doc. No. 116 at 19. Plaintiff urges that Defendants’ proposed construction is too narrow because the specific identifier is not only an indicator of an emergency situation, but rather indicates the broadcast information available about various situations. *Id.* at 21. Plaintiff also argues that, in a petition for *Inter Partes* Review, Defendants acknowledged that the specific identifier relates to both emergencies and other situations. *Id.* at 19.

Defendants argue that construction of this term is unnecessary and would “impermissibly broaden the scope of the claims.” Doc. No. 120 at 20.

Plaintiff replies that because the claims specifically state that specific identifiers are for emergencies, the term “specific identifier” alone is not so limited. Doc. No. 121 at 7–8.

As a threshold matter, Plaintiff’s reliance on Defendants’ *Inter Partes* review petition is unpersuasive because of the broader claim construction standard applied there. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1276–78 (Fed. Cir. 2015), *aff’d sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016).

However, Plaintiff’s proposed construction is supported by the specification:

When the terminal 1 receives, in step S51, a paging message, the terminal 1 or paging mode unit 42 of FIG. 4 checks, in step S52, whether the TMSI included in the paging message corresponds to the TMSI allocated to the terminal 1 from the network, or to *the specific identifier, or one of the specific identifiers, indicating an emergency or other situation of public interest*, and stored in memory unit 44 of FIG. 4.

'129 Patent at 3:35–41 (emphasis added); *see, e.g., id.* at Abstract (“A terminal checks a received paging message with regard to the presence of the specific identifier and when detecting the specific identifier, switches to a broadcast mode for receiving broadcast content.”), 2:29–44, and 2:59–66.

Claim 1 of the '129 Patent, for example, recites (emphasis added):

1. A method of communicating in a bi-directional cellular wireless communication system between a base station and a plurality of mobile terminals supporting an emergency warning, the method comprising:

storing, at a mobile terminal of the plurality of mobile terminals, at least *two specific identifiers* common to the plurality of mobile terminals, the at least *two specific identifiers* being for different types of emergencies;

checking, by the mobile terminal, whether a paging message received from the base station includes at least one *specific identifier* of the at least two *specific identifiers*;

switching, by the mobile terminal, to a broadcast mode for receiving broadcast content on a broadcast channel when the received paging message includes the at least one *specific identifier* of the at least two *specific identifiers*; and

establishing, by the mobile terminal, at least one of a physical channel and a logical channel when the received paging message includes a mobile terminal identifier allocated to the mobile terminal.

Claims 7 and 13 recite similar limitations as to “the at least two specific identifiers being for different types of emergencies” and “at least two specific identifiers supporting an emergency warning,” respectively. This surrounding claim language is consistent with finding that the term “specific identifier,” by itself, is not limited to emergencies. *See Phillips*, 415 F.3d at 1314 (“the claim in this case refers to ‘steel baffles,’ which strongly implies that the term ‘baffles’ does not

inherently mean objects made of steel”). Instead, such limitations stand apart from the disputed term.

During the *Markman* hearing, the parties were essentially in agreement in this regard. The parties acknowledged that in the context of these claims, “specific identifier” is limited to emergency situations. *See* Hearing Recording at 10:15 AM. Thus, because these claim construction proceedings have demonstrated that the parties have no substantive dispute as to the meaning of “specific identifier” itself, that term should be given its plain meaning. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[A]lthough the claims are construed objectively and without reference to the accused device, only those terms need be construed that are in controversy, and *only to the extent necessary to resolve the controversy.*”) (emphasis added).

Accordingly, the Court construes “**specific identifier**” to have its **plain meaning**.

b. “establish/establishing . . . at least one of a physical channel and a logical channel” (Claims 1, 7, and 13)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
No construction necessary. Alternatively, “establishing/establish a physical channel, a logical channel, or both”	“a communication channel (e.g., a point-to-point communication channel) established at a mobile terminal in response to a TMSI received by the terminal”

The underlying dispute is whether the disputed claim term requires a communication channel. Plaintiff argues that no construction is necessary since the disputed claim terms use clear and unambiguous language to require establishing a physical channel, a logical channel, or both. Doc. No. 116 at 21–22. Plaintiff alternatively argues that if construction is required, then Plaintiff proposes the Court’s prior construction of this term in the ’982 *Markman* Order. *Id.* (citing *LG* at

31). Plaintiff further argues that Defendants’ proposal “is an unashamed attempt to limit the claims to a particular embodiment” and “is grammatically nonsensical.” Doc. No. 116 at 22.

Defendants argue that “[c]onstruing these phrases to clarify they mean a communication channel established at a mobile terminal” will assist the jury in understanding the patent without changing the claims’ scope. Doc. No. 120 at 21. Defendants contend that the disputed claim terms indicate, to a person of ordinary skill in the art, that the alleged invention is within a communications network. *Id.* at 22. Defendants further argue that the preamble is limiting. *Id.* Moreover, Defendants note that the Court’s construction in *LG* involved different claims in a different patent. *Id.* at 22–23.

Plaintiff replies that Defendants’ preamble argument relies on the preamble of claim 1 and a pair of citations to the specification, “none of which suggest that a physical or logical channel must be restricted in the way that Defendants suggest, nor do they in any way approach disclaimer or lexicography.” Doc. No. 121 at 8.

First, Defendants’ argument that the preambles of Claims 1, 7, and 13 limit the claimed invention to a communications network is unpersuasive because various claim limitations explicitly refer to communication involving mobile units and a base station. More specifically, as to exemplary Claim 1 of the ’129 Patent, the Court rejects Defendants’ suggestion of importing from the preamble the concept of a “wireless communication system” because the body of the claim already expressly recites “a mobile terminal of the plurality of mobile terminals” as well as “the base station.”

Second, while the *LG* claim construction addressed a different patent, the disputed terms are essentially the same and, here as in *LG*, Defendants propose collapsing the distinct recitals of a “physical channel” and a “logical channel” into merely a “communication channel.” *See LG* at

30–31. Defendants’ proposed construction would improperly import specific features from particular disclosed embodiments as to a “point-to-point” channel “established at a mobile terminal in response to a TMSI.” See *Phillips*, 415 F.3d at 1323.

Therefore, the Court construes the disputed terms as follows, consistent with the Court’s constructions with *LG*:⁶

“establishing, by the mobile terminal, at least one of a physical channel and a logical channel” to mean “establishing, by the mobile terminal, a physical channel, a logical channel, or both.”

“establish at least one of a physical channel and a logical channel” to mean “establish a physical channel, a logical channel, or both.”

c. “a control unit configured to . . .” (Claim 7)

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
<p>Not indefinite.</p> <p>Not governed by 35 U.S.C. § 112, ¶ 6</p> <p>To the extent the Court determines the phrase is governed by 35 U.S.C. § 112, ¶ 6:</p> <p>Structure: “controller”</p> <p>Function: “check whether a paging message . . ., switch to a broadcast mode . . ., establish at least one of . . .”</p>	<p>Indefinite.</p> <p>This is a means-plus-function element to be construed in accordance with 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “check whether a paging message received from the base station includes at least one specific identifier of the at least two specific identifiers; switch to a broadcast mode for receiving broadcast content on a broadcast channel when the paging message received from the base station includes the at least one specific identifier of the at least two specific identifiers; and establish at least one of a physical channel and a logical channel when the received paging message</p>

⁶ See *Maurice Mitchell Innovations*, 2006 WL 1751779, at *4; see also *TQP*, 2014 WL 2810016, at *6; *Teva*, 135 S. Ct. at 839–40; *Finisar*, 523 F.3d at 1329.

	<p>includes a mobile terminal identifier allocated to the mobile terminal”</p> <p>Structure: no corresponding structure disclosed</p>
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The underlying dispute is whether a “control” unit is subject to means-plus-function treatment. Plaintiff argues that “control unit” is not a “nonce” term and instead connotes a class of structures. Doc. No. 116 at 23. Plaintiff also submits that “the claim does not merely claim ‘control unit for’ performing some function; it claims a control unit which is configured to interact with memory and an implied transceiver to cause the claimed apparatus to operate in a particular way.” *Id.* at 24.

Defendants argue that “control unit” is a generic term used by those skilled in the art that is “tantamount to the word ‘means.’” Doc. No. 120 at 24–25. Defendants then argue that there is no disclosed algorithm or structure for the recited functions. *Id.* at 26. Defendants also contend that the term “control unit” is not synonymous with the word “controller.” *Id.* at 27. Further, Defendants argue that “whether the control unit interacts with components that have structure or not is irrelevant to whether the ‘control unit’ itself connotes sufficient structure.” *Id.* at 28. Finally, Defendants argue that the ’129 Patent does not disclose any algorithm or other structure for performing the recited functions of the claimed “controlling unit.” *Id.* at 29.

Plaintiff replies that the control unit of Claim 7 is not a means-plus-function term because “it is a term ‘generally known in the art’ and the description of the control unit’s functions provides structure for the term.” Doc. No. 121 at 9. Plaintiff also notes that, in a petition for *Inter Partes* Review, Defendants did not assert 35 U.S.C. § 112, ¶ 6 as to the present disputed term. *See* Doc. No. 121, Ex. K at 19–21.

Claim 7 of the ’129 Patent recites (emphasis added):

7. A mobile terminal configured for operating in a bi-directional cellular wireless communication system having a base station and a plurality of other mobile terminals supporting an emergency warning, the mobile terminal comprising:

a *memory unit* configured to store at least two specific identifiers common to the plurality of other mobile terminals, the at least two specific identifiers being for different types of emergencies; and

a *control unit* configured to:

check whether a paging message received from the base station includes

at least one specific identifier of the at least two specific identifiers;

switch to a broadcast mode for receiving broadcast content on a

broadcast channel when the paging message received from the base

station includes the at least one specific identifier of the at least two

specific identifiers; and

establish at least one of a physical channel and a logical channel when

the received paging message includes a mobile terminal identifier

allocated to the mobile terminal.

On one hand, Defendants’ expert opined that “those skilled in the art often use the word [*sic*] ‘control unit’ as a generic term to refer to *anything* capable of controlling, whether it be hardware, software, or some combination of hardware and software.” Doc. No. 120, Ex. 7, Aug. 8, 2017 Heegard Decl. at ¶ 35.

On the other hand, Plaintiff submitted an extrinsic technical dictionary definition of “control unit:” “An architectural component of a processor chip which orchestrates processor activity and handles timing to make sure the processor doesn’t overlap functions.” Doc. No. 116, Ex. L, *Newton’s Telecom Dictionary* 208 (2004).

In light of the above-emphasized recital of a “memory unit”—which Defendants do not appear to challenge under 35 U.S.C. § 112, ¶ 6—this dictionary definition of “control unit,” regardless of whether it is precisely applicable here, weighs in favor of finding that a person of ordinary skill in the art would recognize the term “control unit” as referring to a particular type of hardware. *Cf. Williamson*, 792 F.3d at 1351 (“the presence of modifiers can change the meaning of ‘module’”). Likewise, Figure 4 and the accompanying disclosure refer to “control unit 45” in a hardware context. *See* ’129 Patent at 3:16–32 & Fig. 4.

Thus, on balance, the disputed term connotes sufficiently definite structure to one of skill in the art because “control unit” refers to a known type of hardware and because the above-reproduced claim recites objectives of the “control unit” and how it operates within the context of the claimed invention. See *Linear Tech.*, 379 F.3d at 1319–21 (Fed. Cir. 2004) (“circuit [for performing a function]” found to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); see also *Apple*, 757 F.3d at 1295, 1301 (“heuristic [for performing a function]” found to be sufficiently definite structure in part because the claim described the operation and objectives of the heuristic), *abrogated on other grounds by Williamson*, 792 F.3d 1339; *Williamson*, 792 F.3d at 1351 (“the claim does not describe how the ‘distributed learning control module’ interacts with other components in the distributed learning control server in a way that might inform the structural character of the limitation-in-question or otherwise impart structure to the ‘distributed learning control module’ as recited in the claim”); Doc. No. 121, Ex. N, Aug. 15, 2017 Royer Decl. at ¶¶ 41–44.

Defendants note that the Court found the term “designating unit,” in a different patent, was a means-plus-function term in *Cellular Communications Equipment LLC v. HTC Corp., et al.*, No. 6:13-CV-507, Doc. No. 363 (E.D. Tex. Mar. 9, 2015). However, the above-discussed context provided by the claim, disclosure in the specification, and extrinsic evidence cited by Plaintiff warrants a different conclusion as to “control unit” in Claim 7 of the ’129 Patent.

Ultimately, Defendants have failed to overcome the presumption against means-plus-function treatment for this non-means term. The Court rejects Defendants’ proposal of means-plus-function treatment. No further construction is necessary. See e.g., *U.S. Surgical*, 103 F.3d at 1568; see also *O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207; *ActiveVideo*, 694 F.3d at 1326; *Summit 6*, 802 F.3d at 1291.

Therefore, the Court construes “**a control unit configured to**” to have its **plain meaning**, and the Court rejects Defendants’ indefiniteness arguments. No further construction is necessary.

CONCLUSION

For the foregoing reasons, the Court hereby **ADOPTS** the above claim constructions for the patents-in-suit. For ease of reference, the Court’s claim interpretations are set forth in a table in Appendix A.

So ORDERED and SIGNED this 8th day of January, 2018.



K. NICOLE MITCHELL
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

Terms, Phrases, or Clauses	Court's Construction
United States Patent No. 8,385,966	
“preamble power”	“a transmit power of a preamble”
“wherein the initial transmit power depends on a preamble power of a first message sent on an access channel and the second power control adjustment state $f(0)$ ”	“wherein the initial transmit power depends on both: (1) a preamble power of a first message sent on an access channel; and (2) the second power control adjustment state $f(0)$ ”
“wherein the first power control adjustment state $g(i)$ for $i=0$ is initialized as: $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”	“wherein the first power control adjustment state $g(i)$ for $i=0$ is calculated such that: $P_{0_UE_PUCCH} + g(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”
“wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is initialized as: $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”	“wherein the second [accumulation] power control adjustment state $f(i)$ for $i=0$ is calculated such that: $P_{0_UE_PUSCH} + f(0) = \Delta P_{PC} + \Delta P_{rampup}$ ”
“the processor is configured with the memory and the computer program to cause the apparatus to . . . compile a third message to be sent on the uplink shared channel at the initial transmit power”	Plain meaning. Not means-plus-function. Not indefinite.
“offset from the preamble power”	Not indefinite. The antecedent basis for “offset from the preamble power” is “the preamble power of the first message.”
United States Patent No. 9,037,129	
“specific identifier”	Plain meaning.
“establishing, by the mobile terminal, at least one of a physical channel and a logical channel”	“establishing, by the mobile terminal, a physical channel, a logical channel, or both”
“establish at least one of a physical channel and a logical channel”	“establish a physical channel, a logical channel, or both”
“a control unit configured to . . .”	Plain meaning. Not means-plus-function. Not indefinite.