

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

KONINKLIJKE KPN N.V.,

Plaintiff,

v.

TELEFONAKTIEBOLAGET LM
ERICSSON and ERICSSON INC.,

Defendants.

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CIVIL ACTION NO. 2:22-CV-00282-JRG

CLAIM CONSTRUCTION ORDER

Before the Court is the Opening Claim Construction Brief (Dkt. No. 134) filed by Plaintiff Koninklijke KPN N.V. (“Plaintiff” or “KPN”). Also before the Court are the Responsive Claim Construction Brief (Dkt. No. 146) filed by Defendants Telefonaktiebolaget LM Ericsson and Ericsson Inc. (“Defendants” or “Ericsson”) and Plaintiff’s reply (Dkt. No. 150). The Court held a hearing on October 3, 2023. Having reviewed the arguments made by the parties at the hearing and in their claim construction briefing, having considered the intrinsic evidence, and having made subsidiary factual findings about the extrinsic evidence, the Court hereby issues this Claim Construction Order. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*); *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

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I. BACKGROUND

Plaintiff alleges infringement of United States Patents No. 7,092,705, 8,660,560, 8,886,772, 9,372,098, and 10,924,500 (collectively, the “patents-in-suit”). (Dkt. No. 97, Exs. 1–5.) Plaintiff asserts Claims 1–6 and 22–25 of the ’705 Patent, Claims 1 and 6–8 of the ’560 Patent, Claims 1–6 and 10–11 of the ’772 Patent, Claims 17 and 20 of the ’098 Patent, and Claims 1, 5, 7, 9, and 10 of the ’500 Patent. Dkt. No. 135 at 1.

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with preliminary constructions with the aim of focusing the parties’ arguments and facilitating

discussion. Those preliminary constructions are noted below within the discussion for each term.

II. LEGAL PRINCIPLES

It is understood that “[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

“In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015) (citation omitted). “In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the ‘evidentiary underpinnings’ of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.” *Id.* (citing 517 U.S. 370).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent’s claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One

purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee’s invention. Otherwise, there would be no need for claims. *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court’s claim construction analysis is substantially guided by the Federal Circuit’s decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that “the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314–17. As the Supreme Court stated long ago, “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office (“PTO”) understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim

construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; see *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that “a patentee’s statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation”).

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319–24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323–25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The Supreme Court of the United States has “read [35 U.S.C.] § 112, ¶ 2 to require that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). “A determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus*, 572 U.S. 898. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

“[P]rior orders in related cases do not bar the Court from conducting additional construction in order to refine earlier claim constructions.” *TQP Dev., LLC v. Intuit Inc.*, No. 2:12-CV-180-WCB, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J., sitting by designation).

In general, however, prior claim construction proceedings involving the same patents-in-suit are “entitled to reasoned deference under the broad principals 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) (Davis, J.); *see TQP*, 2014 WL 2810016, at *6 (“[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*, 135 S. Ct. at 839–40 (“prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority”) (citation omitted); *Finisar Corp. v. DirecTV 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)).

III. AGREED TERMS

In their August 22, 2023 First Amended Joint Claim Construction and Prehearing Statement Pursuant to Patent Rule 4-3 (Dkt. No. 135, at 2) and in their September 19, 2023 Joint Claim Construction Chart Pursuant to Patent Rule 4-5(d) (Dkt. No. 154, Ex. A, at 5, 9 & 12), the parties submitted the following agreed-upon constructions:

<u>Term</u>	<u>Construction</u>
“operational parameter” (’705 Patent, Claims 1, 2, 6, 22, 23)	“network parameter that controls the operation of a network component”
Preamble of Claim 1 of the ’560 Patent	The preamble is limiting.
“manageable electronic device” (’772 Patent, Claims 1, 10)	“electronic device that can be configured over a network”
“auto-configuration server managing device (ACSMD)” (’772 Patent, Claims 1, 10)	“hardware and/or software that relays configuration requests to the auto-configuration servers”
Preamble of Claim 10 of the ’772 Patent	The preamble is limiting.

IV. DISPUTED TERMS IN U.S. PATENT NO. 7,092,705

The ’705 Patent, titled “System and Method for Checking Parameter Settings of Radio Networks,” issued on August 15, 2006, and bears an earliest priority date of July 9, 2001. The Abstract of the ’705 Patent states:

A method and system for checking modified parameters of components of a radio network. Operational parameters that have been modified are checked on obeying business rules comprising requirements that have been deduced from operational use of the radio network, preferably before they are implemented in the network. The method and system allow application of compressed row techniques in databases comprising the parameters.

1. “technically sufficient parameter setting requirement”

“technically sufficient parameter setting requirement” ('705 Patent, Claims 1, 22)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning. In the alternative, and to the extent that the Court determines that a construction is necessary, the term should be construed to mean “baseline parameter setting or value for technical operation”	Indefinite

(Dkt. No. 134, at 2; Dkt. No. 135, Ex. A, at 8; Dkt. No. 146, at 1; Dkt. No. 154, Ex. A, at 7.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “baseline parameter value for technical operation.”

(a) The Parties’ Positions

Plaintiff argues that this term is reasonably clear and that the '705 Patent provides context by “repeatedly contrast[ing] the old (a ‘technically sufficient parameter setting requirement’ based ‘solely from technical requirements derived from cellular network technology’ that were ‘pre-programmed’ and/or ‘defined by the supplier’) from the new (rules that also took into account lessons learned from ‘daily operational use of the radio network’).” (Dkt. No. 134, at 3 (citing '705 Patent at 2:36–45 & 6:4–17).) Plaintiff also cites prosecution history as well as *Inter Partes* Review (“IPR”) proceedings. (*See id.*, at 4.)

Defendants respond that this disputed term “is a term of degree with no disclosure or objective boundaries to determine if a given setting is, or is not, ‘technically sufficient,’” and “[n]othing in the specification or the prosecution history enables a POSITA to determine objectively whether a given setting, among the plethora of potential settings, is “technically

sufficient’ (particularly in a given use case).” (Dkt. No. 146, at 1 & 2 (citations omitted).) Defendants also argue that the purported contrast relied upon by Plaintiff “still describes the term ‘technically sufficient parameter setting requirement’ in a subjective manner—contrasting two subjective terms (‘more preferable technical parameter setting’ with the ‘technically sufficient parameter setting’) and does not provide objective boundaries for either.” (*Id.*, at 3 (citation omitted).) Further, Defendants argue that “[n]owhere does Dr. Hass [(Defendants’ IPR expert)] say that ‘technically sufficient parameter setting requirement’ is a term of art with a readily understood meaning, nowhere does KPN’s expert provide any objective evidence that it is, and nowhere does KPN provide any authority holding that the term ‘technically sufficient’ or other similar term has been adjudicated to be sufficiently definite to pass muster under 35 U.S.C. § 112.” (*Id.*, at 5.)

Plaintiff replies that this is not a term of degree and, in any event, “the intrinsic record provides a black-and-white standard.” (Dkt. No. 150, at 1.)

At the October 3, 2023 hearing, Defendants argued that the term does not merely refer to a baseline requirement but rather recites a “technically sufficient” requirement, which Defendants argued lacks any objective meaning. Alternatively, Defendants presented an alternative proposal of construing this disputed term to refer to a baseline parameter value “that is not based on an operator/user’s operational practice experience.” Plaintiff responded that although the baseline is not based on operational experience with the particular piece of equipment that is at issue, the baseline could be based on past experience with similar or identical pieces of equipment or earlier versions of the equipment. Defendants replies that this disputed term does not refer to the operator’s experience at all.

(b) Analysis

Claim 1 of the '705 Patent, for example, recites (emphasis added):

1. A method for verifying a modified parameter obtained from changing an operational parameter of a component of a radio network, the method comprising the steps of:

before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result, said rule comprising both a *technically sufficient parameter setting requirement* and a deviation from the setting requirement based on an operational requirement deduced from use of the radio network; and

if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will respond to the modified parameter.

The Background section of the specification states:

Another problem of the method described in the '798 patent relates to the type of rules used in performing the consistency check. The rules used in performing this check originate solely from *technical requirements derived from cellular network technology*. There is no possibility to apply rules derived from operational practice as well. Moreover, it is not possible to deviate from the *technically sufficient parameter setting requirements* if operational practice experience reveals a different more preferable technical parameter setting.

Still another problem of the method described in the 798 patent is that, in performing the consistency check, only pre-programmed rules are used. This limitation decreases the flexibility of the system for the operator that exploits a cellular radio network. It may be that such an operator is not satisfied with the requirements for the various parameters defined by the supplier of the network. The operator may want to define the requirements, including the technical requirements, himself.

'705 Patent at 2:36–54 (emphasis added). The Summary section of the specification states:

It is another object of the invention to enable the use of *rules developed from operational practice* in the verification of the parameter settings in one or more of the levels of the network hierarchy and relationship between elements in the cellular radio network. Hereafter, the rules used to verify the parameter settings will be referred to as business rules. These business rules comprise rules related to *technically preferable requirements* as well as *rules derived from operational practice*.

Id. at 3:5–13 (emphasis added). The specification further discloses:

Moreover, it is preferable that the *bare technically sufficient requirements* can be altered according to rules obtained from daily operational use of the radio network. It can, e.g., be *technically sufficient* to have a channel distance of 20 Hz between different cells. All channel distances above this *value* then will pass the bcc/bcch consistency check. However, in practice it may be that a channel difference of 50 Hz between the cells guarantees a more reliable operation. In that case, according to the invention, it is possible to use the preferred channel distance of 50 Hz, as obtained from the operational practice as a business rule instead of the technically sufficient channel distance. Such a technical requirement will hereinafter be referred to as a *preferred* technical requirement.

Id. at 6:4–17 (emphasis added); *see id.* at 5:56–63 (“contemporary cellular radio networks have reached a considerable amount of complexity”).

The specification thus distinguishes between requirements established in advance of operation (based on information about “cellular network technology”) and requirements that are based on a particular operator’s actual operational experience. The opinions of Plaintiff’s expert are further persuasive in this regard. (*See* Dkt. No. 134, Ex. 6, July 18, 2023 Williams Decl., at ¶ 34; *see also id.*, at ¶¶ 29–36 & 47.)

Likewise, during prosecution, the patentee contrasted a “technically sufficient parameter setting requirement” and “an operational requirement deduced from use of the radio network”:

[T]he Applicants’ present invention involves rules that not only include technically sufficient parameter settings but also deviations from those settings, as necessary. Such deviations are implemented, for each technical setting, by inclusion of an operational requirement there for and which has been deduced from actual network operation. Hence, each of the Applicants’ rules involves two distinct components: a *technically sufficient* parameter setting which effectively provides a *baseline parameter value*, and a *deviation from that value* where the extent of the deviation is deduced from actual network operation. Each proposed (modified) network parameter is then verified by checking it against its corresponding rule to determine whether a proposed change to that parameter is consistent with the rule and hence *actual network operation*, before that parameter is then stored within the network and used in governing subsequent network operation. Incorporating *operationally deduced deviations* into a rule set for verifying proposed network parameters, as the Applicants now teach,

advantageously results in significantly improved network reliability and efficiency.

(Dkt. No. 134, Ex. 7, Dec. 19, 2005 Response at 37–38 (emphasis added).)

Defendants’ indefiniteness challenge fails. First, Defendants do not persuasively establish that “technically sufficient” is a term of degree. For example, this is *not* like the “high” term that was at issue in the *U.S. Well Services* case cited by Defendants. *U.S. Well Servs., Inc. v. Halliburton Co.*, No. 6:21-CV-00367-ADA, 2022 WL 819548, at *6 (W.D. Tex. Jan. 17, 2022) (finding that “high pressure” term “would require a POSITA to make a separate determination for every set of circumstances in which a pump may be used”).

Second, regardless of whether this disputed term might be characterized as a term of “degree,” the above-reproduced portions of the specification provide “objective boundaries” for that term. *See Liberty Ammunition, Inc. v. U.S.*, 835 F.3d 1388, 1397 (Fed. Cir. 2016); *see also Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prods. Grp., LLC*, 879 F.3d 1332, 1346 (Fed. Cir. 2018) (“[a]ll that is required is some standard for measuring the term of degree”). The contrary opinions of Defendants’ expert are unpersuasive. (*See* Dkt. No. 134, Ex. 9, July 18, 2023 van der Weide Decl., at ¶¶ 16–20.) Further, contrary to Defendants’ arguments, the term is not “purely subjective.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014). Alternatively, to whatever extent the term is subjective, if any, the above-reproduced portions of the specification “provide objective boundaries for those of skill in the art” based on the distinction between requirements established in advance of a particular operator’s usage (based on information about “cellular network technology,” ’705 Patent at 2:36–45) and requirements that are based on the operator’s usage. This is not merely a contrast between two subjective terms, as Defendants argue, but rather demonstrates an objective distinction.

Further, Defendants argue that Plaintiff's proposed construction should be rejected because it is not defined in the specification "[n]or is it explained *what* 'baseline parameter setting or value' is needed to enable the 'technical operation' of a given system, particularly where those 'settings' or 'values' will differ among systems, based on the particular use environment, and other changing variables." (Dkt. No. 146, at 4.) Such variation among different accused instrumentalities, however, relates to factual disputes about potential infringement rather than any legal question for claim construction. *See PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) ("after the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact"); *see also Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007) ("[t]he resolution of some line-drawing problems . . . is properly left to the trier of fact") (citing *PPG*, 156 F.3d at 1355); *Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1318–19 (Fed. Cir. 2016) (citing *PPG*, 156 F.3d at 1355; citing *Acumed*, 483 F.3d at 806). The opinion of Defendants' expert in this regard is unpersuasive. (See Dkt. No. 134, Ex. 9, July 18, 2023 van der Weide Decl., at ¶ 22.)

Defendants' reliance on *Netflix*, particularly at the October 3, 2023 hearing, is likewise unavailing. *See CA, Inc. v. Netflix, Inc.*, No. 2:21-CV-00080-JRG-RSP, Dkt. No. 164, 2021 U.S. Dist. LEXIS 221133, 2021 WL 5323413 (E.D. Tex. Nov. 16, 2021). *Netflix* involved the terms "maximizing" and "minimizing," and the Court found that the absence of any "baseline" resulted in a potential for comparisons with arbitrary values when evaluating whether the "maximizing" and "minimizing" limitations were met. In the present case, by contrast, the disputed term is itself directed to the baseline, which is a categorically different analysis than the "maximizing"

and “minimizing” analysis that was at issue in *Netflix*. The *Netflix* analysis is therefore inapplicable here.

Finally, Defendants proposed at the October 3, 2023 hearing that, if the term is not indefinite, then the term should be limited to a value “that is not based on an operator/user’s operational practice experience.” Although the specification contrasts “technical requirements derived from cellular network technology” with rules derived from operational practice, *see* ’705 Patent at 2:36–54, 3:5–13 & 6:4–17 (reproduced above), Defendants do not persuasively demonstrate that this precludes prior operational experience, as a general matter, from being used in the *development* of a “technically sufficient parameter setting requirement.” Rather, at least in the claims here at issue, the distinction is between some pre-existing baseline and a deviation therefrom.

The Court therefore hereby construes **“technically sufficient parameter setting requirement”** to mean **“baseline parameter value for technical operation.”**

2. “a deviation from the setting requirement”

“a deviation from the setting requirement” (’705 Patent, Claims 1, 22)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“a deviation from the technically sufficient parameter setting requirement”	“a deviation from the technically sufficient parameter setting requirement that guarantees a more reliable operation”

(Dkt. No. 134, at 5; Dkt. No. 135, Ex. A, at 6; Dkt. No. 146, at 5; Dkt. No. 154, Ex. A, at 5.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “a deviation from the technically sufficient parameter setting requirement.”

(a) The Parties' Positions

Plaintiff argues: “[T]he specification never suggests that all deviations from the technically sufficient parameter setting requirement must ‘guarantee a more reliable operation.’ Instead, it says that certain deviations from the setting requirement ‘may’ provide such an advantage. And to ensure no ambiguity on this point, the specification states that it will refer to that *subset* of ‘possible’ ‘deviation[s] from the setting requirement’ with a specific name: ‘a preferred technical requirement’—a distinct term from what is at issue here.” (Dkt. No. 134, at 6 (citing ’705 Patent at 6:10–17).)

Defendants respond that “[w]hile [Plaintiff] emphasizes the word ‘may’ and claims that the specification never suggests that deviations from the technically sufficient parameter setting requirement *must* guarantee a more reliable operation, KPN ignores the disclaimer it made in the prosecution history to distinguish the prior art *Madebrink* reference.” (Dkt. No. 146, at 6.) Defendants argue that “KPN is bound by this disclaimer because it distinguished *Madebrink* by adding a limitation to overcome the prior art and claiming that the newly added ‘deviation’ would, unlike the prior art, ‘guarantee a more reliable operation.’” (*Id.*, at 7.)

Plaintiff replies that “Ericsson identifies no statement in which the patentee ever stated that ‘a deviation from the setting requirement’ guarantees a more reliable operation,” and “there was no clear and unequivocal disclaimer here.” (Dkt. No. 150, at 2.)

At the October 3, 2023 hearing, the parties submitted this disputed term on the briefing without oral argument.

(b) Analysis

Claim 1 of the ’705 Patent, for example, recites (emphasis added):

1. A method for verifying a modified parameter obtained from changing an operational parameter of a component of a radio network, the method comprising the steps of:

before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result, said rule comprising both a technically sufficient parameter setting requirement and a *deviation from the setting requirement* based on an operational requirement deduced from use of the radio network; and

if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will respond to the modified parameter.

The specification discloses:

Moreover, it is preferable that the *bare technically sufficient requirements* can be altered according to rules obtained from daily operational use of the radio network. It can, e.g., be *technically sufficient* to have a channel distance of 20 Hz between different cells. All channel distances above this *value* then will pass the bcc/bcch consistency check. However, in practice it may be that a channel difference of 50 Hz between the cells *guarantees a more reliable operation*. In that case, according to the invention, it is possible to use the *preferred* channel distance of 50 Hz, as obtained from the operational practice as a business rule instead of the technically sufficient channel distance. Such a technical requirement will hereinafter be referred to as a *preferred* technical requirement.

'705 Patent at 6:4–17 (emphasis added).

During prosecution, while presenting arguments regarding the “Madebrink” reference, the patentee amended Claims 1 and 22 by adding “and deviating from at least one technically sufficient parameter setting requirement.” (Dkt. No. 146, Ex. A, May 23, 2005 Amendment at 14 & 18; *see id.*, at 24 (“[C]laims 1, 22, 26, 28 and 31 have been amended by adding that the operational use requirement is ‘deviating from at least one technically sufficient parameter setting requirement.’”).)

The patentee further explained:

Applicants respectfully note that the use of the word “sufficient” as introduced in the amended claims is not indefinite. The word “sufficient” is clear within the context of the present application. This is illustrated by referring to the [written description], wherein a “preferred technical requirement” is contrasted with “technical[ly] sufficient requirements”. *The message of this paragraph is that a*

technical requirement that is theoretically sufficient does not guarantee a more reliable operation of the radio network, while a preferred technical requirement “guarantees a more reliable operation”. The invention allows checking of business rules comprising such preferable technical requirements.

* * *

[T]he portion of Madebrink cited by the Examiner is irrelevant with regard to the operational requirement. Only further in the specification of Madebrink, the consistency check is introduced. As explained above, the consistency check of Madebrink essentially differs from the check of the present invention in the nature of the requirements - technical v. operational - that may be used in the verification of the parameters.

The difference in requirements has an important effect. The technical effect is to *obtain more certainty on the reliability* of the radio network after the network parameters have been modified. As an example of the difference between technical and operational requirements, technical requirements are typically less strict than operational requirements.

(*Id.*, at 25 & 28 (emphasis added).)

Although the patentee thus cited language regarding reliability, the patentee did *not* limit the “deviation” to guaranteeing a more reliable operation. Rather, as disclosed in the above-reproduced portion of the specification (’705 Patent at 6:10–17), guaranteeing more reliable operation is disclosed as being achieved by using a “preferred technical requirement.” ’705 Patent at 6:10–17. Indeed, *dependent* Claim 20 recites “a technically *preferable* requirement.” Also, this prosecution history explains that the “deviation” goes beyond what is merely “theoretically sufficient” by taking into account “operational” use, and the express claim language already recites this. *See* ’705 Patent, Cls. 1, 22. Further, this prosecution history notes: “[O]perational requirements may involve other requirements that are not required from a technical point of view. The application gives the example of administrative data (page 10, lines 23–24: ‘e.g. administrative data should preferably be checked as well’).” (Dkt. No. 146, Ex. A, May 23, 2005 Amendment, at 29.)

The prosecution thus contains no definitive statement that would warrant limiting the “deviation” term. *See Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (“prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on *definitive* statements made during prosecution”) (emphasis added); *see also id.* at 1325–26 (“for prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both *clear and unmistakable*”) (emphasis added).

The Court therefore rejects Defendants’ proposal of “that guarantees a more reliable operation,” and the remainder of the construction is agreed upon.

The Court accordingly hereby construes **“a deviation from the setting requirement”** to mean **“a deviation from the technically sufficient parameter setting requirement.”**

3. “a data transferrer”

“a data transferrer” (’705 Patent, Claim 22)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning. In the alternative, and to the extent that the Court determines that the term is a means-plus-function term subject to § 112, ¶ 6, as Defendants argue, the term should be construed to mean: Function: “if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will respond to the modified parameter” Structure: “circuitry capable of performing as described at 4:49–58, 4:59–5:53, 6:29–31, 6:48–52, and/or 6:57–59, or equivalents thereof”	This is a means-plus-function term subject to § 112, ¶ 6. The term is indefinite for lack of sufficiently definite corresponding structure. Function: “store the modified parameter in the network such that subsequent network operation will respond to the modified parameter”

(Dkt. No. 134, at 6–7; Dkt. No. 135, Ex. A, at 9–10; Dkt. No. 146, at 7; Dkt. No. 154, Ex. A, at 8.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Means-plus-function term / Function: ‘if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will respond to the modified parameter’ / Structure: ‘a processor configured to perform the algorithms disclosed in the ’705 Patent at 4:49–57, 6:31–34, 6:48–52 & 6:59–62; and equivalents thereof.’”

(a) The Parties' Positions

Plaintiff argues that Defendants cannot rebut the presumption against means-plus-function treatment for this non-means term. (Dkt. No. 134, at 7.) Plaintiff argues that “the language of the claim describes the operation of ‘data transferrer’ with sufficient detail to provide structure,” and “the specification confirms that the claim (and the term) inherently requires computer circuitry.” (*Id.*, at 8.) Alternatively, Plaintiff argues that “even if an algorithm were required, it is present.” (*Id.*, at 10.)

Defendants respond that “[t]he term ‘data transferrer’ is not a term of art that a POSITA would recognize as having a definite meaning as connoting structure, KPN does not provide any evidence of such a meaning or structure, and the term does not appear anywhere in the specification (other than claims 22 and 26).” (Dkt. No. 146, at 8 (citation omitted).) Defendants also argue that “even KPN’s made up definition is described in terms of functionality (what the ‘data transferrer’ is alleged to do as opposed to what structure, disclosed in the specification, or commonly known to a POSITA, performs the function).” (*Id.*, at 9.)

Plaintiff replies that Defendants ignore Plaintiff’s evidence of structural meaning and do not meet their burden to show that 35 U.S.C. § 112, ¶ 6 applies. (Dkt. No. 150, at 3.) Plaintiff also argues that even if 35 U.S.C. § 112, ¶ 6 applies, “Ericsson offers no evidence for its position—much less to rebut Dr. Williams’ explanation as to how the specification discloses at 4:49–58, 4:59–5:53, 6:29–31, 6:48–52, and/or 6:57–59 examples of the data transferrer the claims require.” (*Id.* (citations omitted).)

At the October 3, 2023 hearing, Defendants argued that this term is a means-plus-function term and that the specification nowhere links any processor (or anything else) to the claimed function. Alternatively, Defendants reiterated that the specification discloses no

algorithm, arguing that the disclosures cited by Plaintiff are functional, not algorithmic. Plaintiff responded that this term refers to a component of a general-purpose computer performing a general-purpose computer function because the specification discloses computer equipment without any indication that it is special-purpose equipment. Plaintiff maintained that the presumption against means-plus-function treatment for this non-means term has not been rebutted. Alternatively, Plaintiff argued that the corresponding structure in the Court's preliminary construction should be modified so as to include 4:59–5:53, which Plaintiff submitted is clearly linked to the “storing” function.

(b) Analysis

Title 35 U.S.C. § 112(f) (formerly § 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.” “In exchange for using this form of claiming, the patent specification must disclose with sufficient particularity the corresponding structure for performing the claimed function and clearly link that structure to the function.” *Triton Tech of Tex., LLC v. Nintendo of Am., Inc.*, 753 F.3d 1375, 1378 (Fed. Cir. 2014).

“[T]he 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).

Williamson, in an en banc portion of the decision, abrogated prior statements that the absence of the word “means” gives rise to a “strong” presumption against means-plus-function treatment. *Id.* (citation omitted). *Williamson* also abrogated prior statements that this presumption “is not readily overcome” and that this presumption cannot be overcome “without a showing that the limitation essentially is devoid of anything that can be construed as structure.” *Id.* (citations omitted). Instead, *Williamson* found, “[h]enceforth, we will apply the presumption as we have done prior to *Lighting World*” *Id.* (citing *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004)). In a subsequent part of the decision not considered en banc, *Williamson* affirmed the district court’s finding that the term “distributed learning control module” was a means-plus-function term that was indefinite because of lack of corresponding structure, and in doing so *Williamson* stated that “‘module’ is a well-known nonce word.” 792 F.3d at 1350.

Here, Claim 22 of the ’705 Patent recites (emphasis added):

22. A system for verifying a modified parameter obtained from changing an operational parameter of a component of a radio network, wherein the system comprises:

a rule checker which, before the modified parameter is implemented in the network, checks the modified parameter on the basis of a rule so as to yield a result, said rule comprising both a technically sufficient parameter setting requirement and a deviation from the setting requirement based on an operational requirement deduced from use of the radio network; and

a data transferrer which, if the result indicates that the rule has been obeyed, stores the modified parameter in the network such that subsequent network operation will respond to the modified parameter.

Plaintiff cites *Mad Dogg*, which noted that “[t]he Federal Circuit has instructed that the claims themselves do not necessarily need to provide an algorithm for a computer-directed claim

term to avoid the ambit of § 112, ¶ 6.” *Mad Dogg Athletics, Inc. v. Peloton Interactive, Inc.*, No. 2:20-CV-00382-JRG, Dkt. No. 88, 2021 WL 3200994, at *15 (E.D. Tex. July 28, 2021). *Mad Dogg* found that the term at issue, “computer,” “refers to a class of structures and each of the claims provides further structural context by reciting how the computer is connected to the other structural elements and how it interacts with those elements” *Id.*

Plaintiff’s general reliance on the *Mad Dogg* case is unavailing. The cited general principle is not in dispute, but in the present case Plaintiff does not demonstrate that the term “data transferrer” has any known meaning in the art. The extrinsic dictionary definition of “data transfer” cited by Plaintiff does not compel otherwise. (Dkt. No. 134, Ex. 10, *Modern Dictionary of Electronics* (7th ed. 1999) (defining “data transfer” as “[m]oving data from one (or more) registers (or memory locations) to another, or interchanging data between registers (memory locations) in many different ways”).) Rather, “data transferrer” is a “coined” or “nonce” term that appears to be equivalent to reciting a means for transferring data. *Egenera, Inc. v. Cisco Sys.*, 972 F.3d 1367, 1373 (Fed. Cir. 2020) (citations omitted); *see Advanced Ground Info. Sys., Inc. v. Life360, Inc.*, 830 F.3d 1341, 1347–48 (Fed. Cir. 2016) (“the term ‘symbol generator’ is a term coined for the purposes of the patents-in-suit” and “is not used in common parlance or by persons of skill in the pertinent art to designate structure”) (citations and internal quotation marks omitted).

This is *not* analogous to the “digital processing unit” at issue in *Samsung v. Prisia*, cited by Plaintiff, because whereas “processing” connoted a computer or processing unit structure, Plaintiff does not show that the term “data transferrer” carries any similar connotations. *See Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1354 (Fed. Cir. 2020) (“As used in the claims of the ’591 patent, the term ‘digital processing unit’ clearly serves as a stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ each of which would be understood as a reference to structure in this case, not simply any device that can perform a particular

function.”). Also, the “circuitry” term in *Estech* and the “converters” in *Elbit*, both cited by Plaintiff, are likewise not analogous. *Estech Sys., Inc. v. Burnco Texas LLC*, No. 2:20-CV-00275-JRG-RSP, Dkt. No. 80, 2021 WL 2530959, at *7, *16–*18 (E.D. Tex. June 18, 2021); *Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC*, No. 2:15-CV-37-RWS-RSP, Dkt. No. 208, 2016 WL 6082571, at *21 (E.D. Tex. Oct. 18, 2016) (citing technical dictionary demonstrating that “converters” “connote structure” in the field).

Further, the opinions of Plaintiff’s expert regarding purported structural connotations are unpersuasive. (See Dkt. No. 134, Ex. 6, July 18, 2023 Williams Decl., at ¶ 61 (opining that the specification “describe[s] the operation of the data transferrer as part of the larger computer network circuitry”); see also *id.*, at ¶¶ 49–60 & 62–70.)

Plaintiff also cites Defendants’ expert’s application of this term in IPR proceedings. (Dkt. No. 134, Ex. 8, Haas Decl., at ¶ 114 (“The programmed computer in the Madebrink-Feuerstein system . . . transfers optimized parameters to the network, so it must include a ‘data transferrer.’”).) This is unpersuasive because an IPR petition cannot assert indefiniteness. See 35 U.S.C. § 311(b); see also *Cuozzo Speed Tech., LLC v. Lee*, 136 S. Ct. 2131, 2141–42 (2016).

The Court therefore finds that the presumption against means-plus-function treatment has been rebutted and that “a data transferrer” is a means-plus-function term. As for the claimed function, the conditional language proposed by Plaintiff is appropriate because it is set forth by the claim and is necessary to identify the proper corresponding structure for this term as used in this particular claim limitation. The claimed function is therefore “if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will respond to the modified parameter.”

As for the corresponding structure, the parties agree that the “data transferrer” is computer-implemented. “In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999); *see Net MoneyIN Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008) (citing *WMS Gaming*); *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364 (Fed. Cir. 2012) (“Requiring disclosure of an algorithm properly defines the scope of the claim and prevents pure functional claiming.”). “[I]t suffices if the specification recites in prose the algorithm to be implemented by the programmer.” *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1386 (Fed. Cir. 2011).

The specification discloses:

The mutated parameters are checked by the business rule checker 70 and *put in the ref part 64 of the database 62 if the changed parameters obey the business rules applied to them* or no business rule exists for the changed parameter or value. A delta list 76 is generated holding the values of the parameters that differ from the original values. These parameter values are *implemented in the radio network 1* by means of a command file generator 75 and a downloader 77. Both the business rule modules and the command file are scripts as indicated by 72 and 73.

The method and system according to an aspect of the invention relate to the management and control of the various parameters in a cellular radio network. Therefore, *the various parameters and/or values can be stored in a database, indicated by 62 in FIG. 3.*

* * *

FIGS. 4A and 4B show a flow chart to illustrate schematically the *application of business rules to parameter changes for the radio network 1* as proposed by the user 69. In the first step 81, a parameter group that is changed in mut 65 is read. Next, the hierarchical level is determined from this parameter group at 82 and subsequently the parameter is found at 83. For this parameter, it may be that no business rule has been defined or programmed. In that case 84, the parameter is

put directly into the ref part 64 of database 62 and is ready to be implemented in the radio network 1. If a business rule does exist for the particular parameter, that business rule is read at 85. *It is checked whether the parameter does obey the business rule.* If the parameter does not obey the business rule an error list is generated and the parameter and corresponding value are put on that list at 86. If the parameter does obey the business rule defined or programmed for that parameter, the next step is to find out whether other parameters have been changed that belong to the parameter group under consideration. These parameters may run through the same series of steps as described above. If all the changed parameters have been put to the business rule test as described above, it is determined whether other parameter groups have been changed as well. The same series of steps as described above may be applied to the parameters belonging to that parameter group. Finally if all the parameter groups have been checked, the business rule checker 70 stops at step 87. *As a result of the business rule checking process, the parameters that obey the business rules defined or programmed for them are put in the ref part 64 of the database 62 at step 88 and are ready to be implemented in the radio network 1.* If the parameters or values do not obey the business rules, the parameters and corresponding values appear on the generated error list and after finalization of the business rule checking of all the parameter groups this error list is put to the user. The user then has to correct the parameters, as shown at step 89. The corrected parameters or values then can be put to the ref part 64 of database 62 as well. *Now the complete set of parameters and corresponding values does obey the business rules and is ready to be implemented to the cellular radio network 1.*

'705 Patent at 4:49–63 & 6:22–62 (emphasis added); *see id.* at 4:59–5:53 (regarding storage).

In particular, the disclosures at 4:49–57, 4:59–5:53, 6:31–34, 6:48–52 & 6:59–62 are “clearly link[ed]” to the claimed function. *Triton*, 753 F.3d at 1378. Finally, Plaintiff does not identify support in the intrinsic record for referring to “circuitry.” Rather, *WMS Gaming* and its progeny support finding that the corresponding structure is a “processor” configured to perform the disclosed algorithms. 184 F.3d at 1349. The Court has also considered the supplemental authority offered by Ericsson, *WSOU Investments LLC v. Google LLC*, Case No. 22-1064 (Fed. Cir. Oct. 6, 2023), and finds that it does not change the result.

The Court therefore hereby finds that **“a data transferrer”** is a **means-plus-function term**, the claimed function is **“if the result indicates that the rule has been obeyed, storing the modified parameter in the network such that subsequent network operation will**

respond to the modified parameter,” and the corresponding structure is “a processor configured to perform the algorithms disclosed in the ’705 Patent at 4:49–57, 4:59–5:53, 6:31–34, 6:48–52, and 6:59–62; and equivalents thereof.”

4. “a rule checker”

“a rule checker” (’705 Patent, Claim 22)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning. In the alternative, and to the extent that the Court determines that the term is a means-plus-function term subject to § 112, ¶ 6, as Defendants argue, the term should be construed to mean: Function: “before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result” Structure: “circuitry capable of performing as ‘business rule checker 70,’ including as described at 4:49–53, 4:57–58, 5:54–56, 6:18–21, and/or 6:25–65, and equivalents thereof”	This is a means-plus-function term subject to § 112, ¶ 6 Function: “check the modified parameter on the basis of a rule so as to yield a result” Structure: “a processor programmed to run a script and equivalents thereof”

(Dkt. No. 134, at 10–11; Dkt. No. 135, at 7; Dkt. No. 146, at 9; Dkt. No. 154, Ex. A, at 6.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Means-plus-function term / Function: ‘before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result’ / Structure: ‘business rule checker 70; and equivalents thereof.’”

(a) The Parties' Positions

Plaintiff argues that Defendants cannot rebut the presumption against means-plus-function treatment for this non-means term, which is recited as being part of a “radio network,” and “[t]his structural nature is bolstered by detail in the claim itself regarding the ‘acts’ such computer circuitry must perform, i.e., it must check the contemplated modified network parameter on the basis of a rule that accounts for operational usage before the modified parameter is implemented in the network.” (Dkt. No. 134, at 11.) Alternatively, Plaintiff argues that “[Defendants’] proposed structure of a ‘processor programmed to run a script and equivalents thereof’ is too limited,” and “[t]he word ‘processor’ appears nowhere in the patent, which discloses what is really required: circuitry able to perform the described computing functionality.” (*Id.*, at 12.)

Defendants argue that “[b]ecause the term ‘a rule checker’ is a nonce term, and KPN presents no evidence to the contrary, it should be construed as a means-plus-function term.” (Dkt. No. 146, at 10.) Defendants also argue that “there is no evidence that ‘a rule checker,’ even if it was a known to be a performed by a [*sic*] computer circuitry, connotes any specific structure.” (*Id.*) As for the corresponding structure, Defendants argue that “KPN has not shown an example in the specification where the rule checker is implemented by something other than a script.” (*Id.* (citation omitted).) Further, Defendants argue that “KPN improperly attempts to define the structure of the claimed ‘rule checker’ using functional language” (*Id.*, at 11 (citation omitted).)

Plaintiff replies that “the only evidence in the record—including Ericsson’s proposal to construe this term to require a ‘processor’—shows the term serve[s] as a stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ the presumption stands, and § 112 ¶ 6 does not

apply.” (Dkt. No. 150, at 3 (citations and internal quotation marks omitted).) Alternatively, Plaintiff argues that Defendants’ proposed corresponding structure “fails to account for all of the specification’s disclosures and a POSITA’s knowledge.” (*Id.*, at 4 (citation omitted).)

At the October 3, 2023 hearing, Plaintiff stated that it had no objection to the Court’s preliminary construction, and Plaintiff argued that the disclosure in the specification regarding using a “script” is merely an example because it is introduced by the word “may.” ’705 Patent at 6:18–21. Plaintiff also argued that the “rule checker” is not limited to any particular type of processor but rather is implemented by a general-purpose computer. Defendants responded that the word “may” refers to whatever rules may be implemented by a user and that the only disclosed way of implementing a rule checker is by a script. Plaintiff replied that “may” is permissive as to whether a script is used and that other embodiments are possible such as by using logic gates or by otherwise embedding a rule checker in circuitry.

(b) Analysis

Legal principles regarding 35 U.S.C. § 112(f) are set forth as to the term “a data transferrer,” above.

Claim 22 of the ’705 Patent recites (emphasis added):

22. A system for verifying a modified parameter obtained from changing an operational parameter of a component of a radio network, wherein the system comprises:

a *rule checker* which, before the modified parameter is implemented in the network, checks the modified parameter on the basis of a rule so as to yield a result, said rule comprising both a technically sufficient parameter setting requirement and a deviation from the setting requirement based on an operational requirement deduced from use of the radio network; and

a data transferrer which, if the result indicates that the rule has been obeyed, stores the modified parameter in the network such that subsequent network operation will respond to the modified parameter.

Essentially the same analysis applies to this term as set forth regarding “a data transferrer,” which is addressed above. Here, too, “rule checker” does not connote any known class of structures or otherwise carry any structural connotations, and the recital of this term as part of a “radio network” likewise does not demonstrate that “rule checker” connotes any structure. The authorities cited by Plaintiff are distinguishable for the same reasons discussed as to “a data transferrer,” above. The *CXT* case cited by Plaintiff does not compel otherwise. *CXT Sys., Inc. v. Acad., Ltd.*, No. 2:18-CV-171, Dkt. No. 207, 2019 WL 4253841, at *11 (E.D. Tex. Sept. 6, 2019) (“‘processing module for processing’ . . . is inherently structural”). The opinions of Plaintiff’s expert are likewise unpersuasive. (See Dkt. No. 134, Ex. 6, July 18, 2023 Williams Decl., at ¶¶ 54–68.)

The Court therefore finds that the presumption against means-plus-function treatment has been rebutted, and “a rule checker” is a means-plus-function term. As for the claimed function, the conditional language proposed by Plaintiff is appropriate because it is set forth by the claim and is necessary to identify the proper corresponding structure for this term as used in this particular claim limitation. The claimed function is therefore “before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result.”

As for the proper corresponding structure, Plaintiff’s proposal of including particular column and line numbers is unnecessary because the term “a rule checker” is clearly linked to the disclosure of “business rule checker 70.” See ’705 Patent at 4:49–53, 5:54–56 & 6:18–21.

Finally, Defendants persuasively argued at the October 3, 2023 hearing that the disclosed corresponding structure requires a “script.” See *id.* at 6:19–6:21 (“The business rules may be formulated by the user and implemented as a script.”); see also *id.* at 7:18–20 (“Business rules

can, e.g., be applied by running a main script calling the separate business rule modules selected by the user or imposed by the system.”); *id.* at 7:46–8:11. Although the specification uses permissive or exemplary language such as “may” and “e.g.,” the disputed term is a means-plus-function term and is therefore construed according to the *disclosed* corresponding structure. 35 U.S.C. § 112(f) (“such claim shall be construed to cover the corresponding structure, material, or acts *described in the specification* and equivalents thereof”) (emphasis added). Plaintiff’s suggestions, at the October 3, 2023 hearing, of other structures that purportedly would occur to a person of ordinary skill in the art are therefore unpersuasive.

The Court’s construction, however, does not include “script” because the disclosures regarding using a script are part of the disclosure of the corresponding structure “business rule checker 70.”

The Court therefore hereby finds that **“a rule checker”** is a **means-plus-function term**, the claimed function is **“before the modified parameter is implemented in the network, checking the modified parameter on the basis of a rule so as to yield a result,”** and the corresponding structure is **“business rule checker 70; and equivalents thereof.”**

V. DISPUTED TERMS IN U.S. PATENT NO. 8,660,560

The ’560 Patent, titled “System for Updating a Neighbour Cell List (NCL) of a Wireless Access Node of a Telecommunications Architecture and Method Therefore,” issued on February 25, 2014, and bears an earliest priority date of October 7, 2009. The Abstract of the ’560 Patent states:

The invention relates to a system and method for updating a neighbour cell list of a wireless access node. User terminals to be to be [*sic*] transferred from a first wireless access node of a first wireless access network to a second wireless access node of a second wireless access network are detected. From the first wireless access node, one or more of the detected user terminals are requested to report cell information of a plurality of wireless access nodes of at least one of the first

wireless access network and the second wireless access network. The cell information is received from the one or more of the detected user terminals and at least one of the first neighbour cell list and the second neighbour cell list is updated using the received cell information.

5. “configured for”

“configured for” (’560 Patent, Claims 1, 6, 7)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	“includes the necessary hardware and software for performing the functionality recited in the claim without the need to rebuild, rewrite or recompile the code for, or redesign any of that hardware or software”

(Dkt. No. 134, at 12; Dkt. No. 135, Ex. A, at 10; Dkt. No. 146, at 13; Dkt. No. 154, Ex. A, at 9.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Plain meaning [NOTE: rejecting Defendants’ proposed construction].”

(a) The Parties’ Positions

Plaintiff argues: “Despite the Court’s prior direction and rulings, and despite the fact that—as in the last case—KPN does not dispute that ‘configured for’ requires something more than merely being capable of, Ericsson now asks the Court to redefine the ’560 Patent’s easy-to-understand ‘configured for’ term to something far narrower.” (Dkt. No. 134, at 13.) Plaintiff argues that “this Court’s prior ruling is dispositive and bars Ericsson from seeking its narrower construction,” and alternatively Plaintiff argues that “[n]either the claims nor the specification require ‘necessary hardware and software[,]’ [n]or is there any intrinsic support for Ericsson’s proposal to write ‘without the need to rebuild, rewrite or recompile the code’ into the claims.” (*Id.* at 13–14 (citation omitted).)

Defendants respond by citing the Court’s discussion of the term “configurable to” in another case, submitting that “Ericsson’s proposed construction is based on language that this Court has previously discussed when the term in dispute was ‘configurable to.’” (Dkt. No. 146, at 13 (discussing *TQ Delta LLC v. CommScope Holding Co.*, No. 2:21-CV-310-JRG, Dkt. No. 169, 2022 WL 2071073, at *8 (E.D. Tex. June 8, 2022)).) Defendants also submit that “[t]o resolve the parties’ dispute regarding the scope of the ‘configured for’ claim limitation, Ericsson seeks a construction clarifying that the accused products must be made, used, or sold in a state capable of performing the functional limitations of the claims.” (Dkt. No. 146, at 14.) Further, Defendants argue that “KPN does not address any of the four conditions that must be met for issue preclusion to apply,” and Defendants argue that “the ’560 Patent is not related to any patent at-issue in *KPN I*,” that “the proper construction of ‘configured for’ in the ’560 Patent is not identical to any issue decided in *KPN I*,” and that “KPN has not met its burden to show that any of the other elements apply.” (*Id.*, at 14–15 (citations omitted).)

Plaintiff replies that Defendants are advancing an argument that this Court has already rejected, and indeed “KPN *agrees* ‘configured for’ requires more than capability.” (Dkt. No. 150, at 4 & 5.)

At the October 3, 2023 hearing, the parties presented oral arguments regarding this term.

(b) Analysis

The Court held a jury trial in August 2022 in *Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson, et al.*, No. 2:21-CV-00113-JRG, and the parties refer to that case as “*KPN I*.” During that trial, the parties presented competing positions on whether accused instrumentalities were “configured to” perform in a particular way. Plaintiff submits that it argued in *KPN I* that “if a product comes programmed with specific code to implement claimed

functions, it falls within the claims” and is not “merely” “capable of” performing a function.” (Dkt. No. 134, at 13.)

As a threshold matter, although “configured to” was construed in *KPN I*, and although “[i]ssue preclusion prohibits a party from seeking another determination of the litigated issue in [a] subsequent action,” issue preclusion does not apply at least because the construction was undisputed in *KPN I* and because the ’560 Patent here at issue is not related to the patent that was at issue as to “configured to” in *KPN I*. *State Farm Mut. Auto. Ins. Co. v. LogistiCare Sols., LLC*, 751 F.3d 684, 689 (5th Cir. 2014) (“First, the issue under consideration in a subsequent action must be identical to the issue litigated in a prior action. Second, the issue must have been fully and vigorously litigated in the prior action. Third, the issue must have been necessary to support the judgment in the prior case. Fourth, there must be no special circumstance that would render preclusion inappropriate or unfair.”) (citations and quotation marks omitted); *see Asper Eyewear, Inc. v. Zenni Optical LLC*, 713 F.3d 1377, 1381 (Fed. Cir. 2013) (“identity of the issues” requires that the asserted claim “contains the same . . . limitation, in the same context,” as in the prior action).

Turning to the claim language, Claim 1 of the ’560 Patent recites (emphasis added):

1. A system for updating a neighbour cell list in a telecommunications architecture comprising a first wireless access network having a first wireless access node for which at least one first neighbour cell list is defined and a second wireless access network having a second wireless access node for which at least one second neighbour cell list is defined, the system comprising:
 - a detector *configured for* detecting user terminals to be transferred from the first wireless access node of the first wireless access network to the second wireless access node of the second wireless access network;
 - a selector *configured for* selecting a part of the user terminals;
 - a request generator *configured for* requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of at least one of the first wireless access network and the second wireless access network;

a receiver *configured for* receiving the cell information from the one or more of the selected user terminals; and
 updating means *configured for* updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information.

As Plaintiff submits, this Court found in *KPN I* as to U.S. Patent No. RE48,089 (as well as in other unrelated cases) that “merely being ‘capable of’ performing a function is not enough.” *KPN I*, Dkt. No. 320, slip op. at 7 (E.D. Tex. July 20, 2023); *see, e.g., Ahern Rentals, Inc. v. EquipmentShare.com, Inc.*, No. 2:20-CV-333-JRG, Dkt. No. 84, 2021 WL 4891379, at *11 (E.D. Tex. Oct. 19, 2021) (“configured” requires “more than just ‘capable of’”). The Court in *KPN I* discussed, for example, *INVT SPE LLC v. Int’l Trade Comm’n*, 46 F.4th 1361, 1375 (Fed. Cir. 2022), in which the Federal Circuit stated: “For infringement purposes, a computer-implemented claim drawn to a functional capability requires some showing that the accused computer-implemented device is programmed or otherwise configured, without modification, to perform the claimed function when in operation.”

This Court in *KPN I* also discussed “configured to” (in claims of the ’098 Patent) with reference to whether any “reconfiguration or reprogramming” is required. *KPN I*, Dkt. No. 320, at 7 (E.D. Tex. July 20, 2023) (“... KPN identifies substantial evidence that no reconfiguration or reprogramming of Ericsson’s base stations or software would be necessary.”); *id.*, Dkt. No. 321, at 5 (“[T]he mere status of Ericsson’s license keys as being enabled/disabled or activated/deactivated (similar to whether actual user consent is received or not) is not dispositive of whether Ericsson’s products infringe the asserted claims of the ’089 patent, which recite, in part, an information collector ‘*configured to*’ perform various functions.”).

Likewise, in other cases, the Court has found that “‘configured to’ and ‘adapted to’ plainly do not encompass structure that is merely ‘configurable’ or ‘adaptable’ to perform the claim-recited function but is not in a state to perform the function.” *Huawei Techs. Co. v.*

Verizon Commc'ns, Inc., No. 2:20-CV-30-JRG, Dkt. No. 162, 2021 WL 150442, *18–*20 (E.D. Tex. Jan. 15, 2021); *see TQ Delta*, 2022 WL 2071073, at *7–*8.

Defendants' proposal of "includes the necessary hardware and software for performing the functionality recited in the claim without the need to rebuild, rewrite or recompile the code for, or redesign any of that hardware or software," however, would introduce various limitations without adequate support in the intrinsic record and for the apparent purpose of attempting to resolve an infringement dispute regarding particular accused instrumentalities. The Court therefore rejects Defendants' proposed construction, and any remaining disagreement presents a factual dispute regarding infringement rather than any legal issue for claim construction. *See PPG*, 156 F.3d at 1355 ("after the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact"); *see also Acumed*, 483 F.3d at 806; *Eon*, 815 F.3d at 1318–19; *cf. KPN I*, Dkt. No. 320, at 6–7.

The Court accordingly hereby construes "**configured for**" to have its **plain meaning**.

6. “updating means”

“updating means” (’560 Patent, Claim 1)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning. In the alternative, and to the extent that the Court determines that the term is a means-plus-function term subject to § 112, ¶ 6, as Defendants argue, the term should be construed to mean: Function: “updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information” Structure: “circuitry capable of performing as “updater 14,” including as described at 1:49–2:7, 8:50–60, 9:26–28, 9:29–32, 9:58–59, 10:19–36, 10:37–52, 10:63–11:32, and/or in 3GPP TS 36.300, V8.9.0, and equivalents thereof”	This is a means-plus-function term. Function: “updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information” Structure: ““updater 14’ disclosed in the ’560 Patent and equivalents thereof. <i>See</i> ’560 Patent at Fig. 2, 9:26–28, 9:58–59.

(Dkt. No. 134 at 14; Dkt. No. 135, Ex. A, at 11; Dkt. No. 146, at 11; Dkt. No. 154, Ex. A, at 10–11.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Means-plus-function term / Function: ‘updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information’ / Structure: ‘updater 14; and equivalents thereof.’”

(a) The Parties’ Positions

Plaintiff argues that “Claim 1 shows that the ‘updating means’ is performed by ‘a system ... in a telecommunications architecture,’ which is necessarily computer circuitry, i.e.,

structure.” (Dkt. No. 134, at 15 (citing *Estech Sys., Inc. v. Burnco Texas LLC*, No. 2:20-CV-00275-JRG-RSP, Dkt. No. 80, 2021 WL 2530959, at *7 (E.D. Tex. June 18, 2021)).) Alternatively, Plaintiff argues that “Ericsson’s proposed structure ignores (and omits) significant disclosures in the specification regarding the term.” (Dkt. No. 134, at 15.)

Defendants respond that “the term ‘updating means’ is a textbook nonce term that invokes 35 USC § 112(6).” (Dkt. No. 146, at 12.) As for the corresponding structure, Defendants argue that “KPN attempts to define the structure of the claimed ‘updating means’ using functional language,” “includes a laundry list of citations to the specification that have nothing to do with ‘updater 14,’” and “attempts to incorporate an entire 100-page prior art reference into its proposed construction.” (*Id.*, at 13.)

Plaintiff replies that the “the disclosed telecommunications circuitry is *necessarily* structural,” and “Ericsson ignores that the specification provides detailed disclosures about the ‘updating means’ at 1:49–2:7, 8:50–60, 9:29–32, 10:19–36, 10:37–52, and 10:63–11:32, including by incorporating 3GPP TS 36.300, V8.9.0.” (Dkt. No. 150, at 5 (citation omitted).)

At the October 3, 2023 hearing, the parties presented no oral arguments and instead submitted this disputed term on the briefing.

(b) Analysis

Legal principles regarding 35 U.S.C. § 112(f) are set forth above as to the term “a data transferer.”

Claim 1 of the ’560 Patent recites (emphasis added):

1. A system for updating a neighbour cell list in a telecommunications architecture comprising a first wireless access network having a first wireless access node for which at least one first neighbour cell list is defined and a second wireless access network having a second wireless access node for which at least one second neighbour cell list is defined, the system comprising:

a detector configured for detecting user terminals to be transferred from the first wireless access node of the first wireless access network to the second wireless access node of the second wireless access network;

a selector configured for selecting a part of the user terminals;

a request generator configured for requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of at least one of the first wireless access network and the second wireless access network;

a receiver configured for receiving the cell information from the one or more of the selected user terminals; and

updating means configured for updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information.

“Merely because a named element of a patent claim is followed by the word ‘means’” does “not automatically make that element a ‘means-plus-function’ element under 35 U.S.C. § 112, ¶ 6.” *Williamson*, 792 F.3d at 1348.

Nonetheless, “use of the word ‘means’ in a claim element creates a rebuttable presumption that § 112, para. 6 applies.” *Id.* (citations and internal quotation marks omitted); *see Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022) (“Because invoking § 112 ¶ 6 is typically a choice left to the claim drafter, we presume at the first step of the analysis that a claim limitation is subject to § 112 ¶ 6 when the claim language includes the term ‘means.’”) (citing *Williamson*, 792 F.3d at 1348).

Plaintiff does not persuasively rebut this presumption, particularly in light of this claim limitation using the traditional means-plus-function format of the word “means” followed by “for” and functional language. *Williamson*, 792 F.3d at 1350. The recital of the “updating means” as part of “a system . . . in a telecommunications architecture” does not compel otherwise. The *Estech* case cited by Plaintiff also does not compel otherwise. *See* 2021 WL 2530959, at *18 (“The Federal Circuit has instructed that claim recitation of the objectives or operation of a circuit denotes structure.”). Here, the claim does not limit the “updating means” to being a processor or circuitry or any other particular class of structures.

The Court therefore finds that the presumption in favor of means-plus-function treatment has *not* been rebutted and that the “updating means” limitation is a means-plus-function limitation. The parties agree that the claimed function is “updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information.”

The parties also essentially agree that the corresponding structure is “updater 14.” The specification discloses, for example:

After cell reselection or handover to a cell of NodeB 2A, the transmitter 24 transmits the cell information CI, obtained while camping on the cell of eNB 1A, to a receiver 13 of NodeB 2A. Receiver 13 forwards the cell information to an updater 14 configured for updating (including verification) of the NCL-2A using the cell information CI.

’560 Patent at 9:23–28.

The parties present competing listings of specification disclosures that each side contends should accompany the identification of “updater 14” as corresponding structure, but the proper corresponding structure is simply the “updater 14” however it is described in the specification. That is, whatever the specification requires of “updater 14” is required as part of the corresponding structure construction. Any material merely incorporated by reference, however, is not part of the corresponding structure construction. *Cf. Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1301 (Fed. Cir. 2005) (“material incorporated by reference cannot provide the corresponding structure necessary to satisfy the definiteness requirement for a means-plus-function clause”). No further construction is necessary.

The Court therefore hereby finds that **“updating means”** is a **means-plus-function term**, the claimed function is **“updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information,”** and the corresponding structure is **“updater 14; and equivalents thereof.”**

VI. DISPUTED TERMS IN U.S. PATENT NO. 8,886,772

The '772 Patent, titled “Method and System for Remote Device Management,” issued on November 11, 2014, and bears an earliest priority date of July 31, 2008. The Abstract of the '772 Patent states:

A system for remote device management includes in a network an auto-configuration server managing device, at least one database, and a plurality of auto-configuration servers. The auto-configuration server managing device and the database are coupled in a communicative connection. The database holds information for identification of electronic devices. The auto-configuration server managing device is arranged for communication with a manageable electronic device over the network. The auto-configuration server manager is further being arranged for:

receiving a request from the manageable electronic device for configuration data,

determining an identification of the manageable electronic device by comparing the request with the information for identification of electronic devices of the database,

determining an identification of an auto-configuration server from the plurality of auto-configuration servers in accordance with the identification of the manageable electronic device.

The Court previously construed disputed terms in the '772 Patent in *Koninklijke KPN N.V. v. Samsung Elecs. Co., Ltd.*, No. 2:14-CV-1165-JRG, Dkt. No. 197, 2016 WL 2610649 (E.D. Tex. May 6, 2016) (“*Samsung*”). The *Samsung* case settled before trial.

7. “relay”

“relay” (’772 Patent, Claims 1, 2, 10, 11)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“change, process, or otherwise manage a request based at least in part on its payload”	“send”

(Dkt. No. 134, at 16; Dkt. No. 135, Ex. A, at 12; Dkt. No. 146, at 15; Dkt. No. 154, Ex. A, at 12.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “change, process, or otherwise manage a request based at least in part on its payload, and forward.”

(a) The Parties’ Positions

Plaintiff argues that “[a]s this Court already has held, KPN clearly and unequivocally disclaimed a broader construction of ‘relay.’” Dkt. No. 134 at 16.

Defendants argue that the Court should depart from its prior construction because “[d]espite having the benefit of the Court’s 2016 construction, KPN argued that ‘relay’ means ‘send’ to the PTAB in 2023,” and because “in the *KPN v. Xiaomi* case in Delaware, KPN filed a joint claim construction brief on June 10, 2022 where it also represented to the Delaware Court that ‘relay’ means ‘send.’” (Dkt. No. 146, at 16.) Defendants also argue that “even if KPN had not argued in 2023 and 2022 that ‘relay’ means ‘send,’ the Court’s 2016 construction is also potentially problematic because it fails to capture the ‘action’ that ‘relay’ entails and introduces ambiguity that is not present if ‘relay’ is construed as ‘send.’” (*Id.*) Further, Defendants argue that whereas “relay” is an “active verb,” “the 2016 construction fails to account for this action—it does not require the request to be ‘sent’ or ‘passed on.’” (*Id.*, at 17.)

Plaintiff replies that Defendants mischaracterize Plaintiff’s statements in IPR proceedings, that Defendants cite Plaintiff’s statements in a case in which the term “relay” was not at issue, and that Defendants improperly rely on a broad general meaning outside of the context of the intrinsic evidence. (Dkt. No. 150, at 6.)

At the October 3, 2023 hearing, Plaintiff stated that it has no objection to the Court’s preliminary construction. Defendants argued that the Court’s preliminary construction, like the *Samsung* construction, is vague and is not supported by any disclaimer. Plaintiff responded that,

as found in *Samsung*, the patentee gave this term a meaning narrower than merely forwarding or sending. Plaintiff argued that Defendants have no support for their proposition that a patentee could somehow disclaim a disclaimer. Also, Plaintiff argued that the PTAB found that it need not construe this term as part of the decision on whether to institute an IPR.

(b) Analysis

Claim 1 of the '772 Patent, for example, recites (emphasis added):

1. A system for remote device management comprising:
 - a plurality of auto-configuration servers (ACSs);
 - a manageable electronic device;
 - an auto-configuration server managing device (ACSMD) for controlling access to the ACSs communicatively coupled intermediately between the plurality of ACSs and the managed electronic device; and
 - at least one database communicatively coupled to the ACSMD and storing information for the identification of electronic devices,
 - wherein the manageable electronic device is configured to send a request for configuration data to the ACSMD,
 - wherein configuration data comprise data for configuring the manageable electronic device, and
 - wherein the ACSMD is configured, responsive to receiving the request, to:
 - identify the manageable electronic device by comparing at least a portion of the request with the information for the identification of electronic devices of the at least one database, and
 - identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device, and
 - wherein the ACSMD is further configured to *relay* the request to the identified ACS.

In *Samsung*, the Court construed “relay” to mean “change, process, or otherwise manage a request based at least in part on its payload.” *Samsung* at 61. In doing so, the Court found that Plaintiff made a disclaimer during prosecution by stating that “[o]ne of ordinary skill in the art would, in this case, recognize that relaying a request includes the possibility to change, process,

or otherwise manage the request, all of which would require that the ACSMD unravel the incoming message to determine what action, if any, is required to be taken.” *Id.* at 60.

Defendants’ reliance on a proposed construction in a Joint Claim Construction Chart in the *Xiaomi* case in the District of Delaware is unpersuasive because this is extrinsic evidence and because Plaintiff did not purport to depart from the prior construction of “relay” when arguing to the District of Delaware, as to the term “wherein the ACSMD is further configured to relay the request to the identified ACS,” that “the message is passed from one device to another.” (*See* Dkt. No. 134, Ex. 12, No. 21-CV-41-LPS-CJB, Mar. 11, 2022 Joint Claim Construction Chart, at 8; Dkt. No. 146, Ex. C, *Koninklijke KPN N.V. v. Xiaomi Corp.*, No. 21-CV-41-VAC-CJB, June 10, 2022 Joint Claim Construction Brief, at 55.) To the extent Plaintiff’s statements in *Xiaomi* are deemed relevant, if at all, the dispute in the present case does not appear to have been a dispute in *Xiaomi*.

Defendants also cite Plaintiff’s statements in IPR proceedings. As a threshold matter, Plaintiff’s statements in IPR proceedings are part of the prosecution history and are therefore intrinsic evidence. *Aylus Networks*, 856 F.3d at 1362. Still, whereas Defendants rely on Plaintiff’s statement that “a jury could read ‘relay’ as ‘send’” (Dkt. No. 134, Ex. 11, June 17, 2023 Patent Owner’s Preliminary Response, at 28), the document as a whole reflects Plaintiff’s support for the Court’s prior construction. (*See* Dkt. No. 134, Ex. 11, June 17, 2023 Patent Owner’s Preliminary Response, at 26–29.) Indeed, Plaintiff urged that the above-discussed proposal and arguments in the District of Delaware did *not* amount to any departure from this Court’s prior construction. (*See id.*, at 27–29.)

Finally, Defendants argue that the Court’s prior construction is vague and overbroad (because of the use of the word “or”) and also lacks sufficient “action” such as being “sent” or

“passed on.” (Dkt. No. 146, at 17 (citing “<https://www.google.com/search?q=dictionary=relay> (last accessed September 4, 2023)”).) In *Samsung*, the Court relied upon prosecution history in which the patentee distinguished the “Acke” reference (United States Patent Application Publication No. 2009/0219820), arguing:

Applicants respectfully submit that what Acke teaches is different from what is now recited in claim 1.

More particularly, Acke teaches “The TR-069 session is *forwarded* by the proxy to the appropriate ACS. Connection requests coming from the ACS(s) can also be *forwarded* or proxied toward the CPE” (emphasis added). As one of ordinary skill in the art would readily understand, *forwarding* session requests and connection requests entails transferring messages from a receiving incoming port of a device to an appropriate transmitting outgoing port of the device, *without changing or processing the messages*. That is, the device, such as a proxy server, does not process or even read the payload of a message that is to be forwarded, but merely reads the message header to determine the correct outgoing port, and then substitutes the previously used header — which will have, e.g., addressed the proxy server since that is where the message was delivered — with a new header indicating the new address, being the address to which the proxy server *forwards* the message.

In contrast, claim 1 recites, *inter alia*, “wherein the ACSMD is further configured to *relay* the request to the identified ACS” (emphasis added). One of ordinary skill in the art would, in this case, recognize that *relaying* a request includes the possibility to change, process, or otherwise manage the request, all of which would require that the ACSMD unravel the incoming message to determine what action, if any, is required to be taken. * * *

Samsung at 60 (quoting *Samsung*, Ex. 18, Feb. 11, 2014 Response, at 10–11.)

The Court’s construction was thus informed by particular intrinsic evidence specific to the ’772 Patent. Defendants’ reliance on extrinsic evidence as well as a general suggestion of overbreadth (Dkt. No. 146, at 17) does not warrant departing from the Court’s prior construction.

The Court therefore hereby construes **“relay”** to mean **“change, process, or otherwise manage a request based at least in part on its payload, and forward.”**

8. “plurality of auto-configuration servers (ACSs)” and “ACS”

“plurality of auto-configuration servers (ACSs)” (’772 Patent, Claim 1, 10)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“two or more systems of hardware and/or software, each of which is capable of automatically configuring a manageable electronic device”	“two or more systems of hardware and/or software, each of which is capable of automatically configuring a manageable electronic device, and neither of which is at a service provider”
“ACS” (’772 Patent, Claims 1, 2, 5, 6, 10, 11)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“a system of hardware and/or software, which is capable of automatically configuring a manageable electronic device”	“a system of hardware and/or software, which is capable of automatically configuring a manageable electronic device and is not at a service provider”

(Dkt. No. 134, at 17; Dkt. No. 135, Ex. A, at 13–15; Dkt. No. 146, at 17; Dkt. No. 154, Ex. A, at 14 & 15.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary constructions for these two disputed terms: “two or more systems of hardware and/or software, each of which is capable of automatically configuring a manageable electronic device”; and “a system of hardware and/or software, which is capable of automatically configuring a manageable electronic device.”

(a) The Parties’ Positions

Plaintiff argues that “nothing in the claims, specification, or prosecution history supports the negative limitation Ericsson asks the Court to impose,” and “KPN never disclaimed service

providers serving as ACSs—much less disclaimed that configuration servers ‘at a service provider’ could be an ACS.” (Dkt. No. 134, at 18 & 19.)

Defendants respond that “the Court should not simply adopt its prior construction,” and “[i]nstead, and based on the disclaimer KPN made in its June 17, 2023 ’772 POPR, the Court should add the limitation ‘is not at a service provider’ to the prior construction of ACS.” (Dkt. No. 146, at 17.) Defendants argue that “KPN was clear that the ’772 Patent teaches the request for configuration data must be relayed directly to an ACS and not to ACSs that are housed at a service provider.” (*Id.*, at 19.)

Plaintiff replies that “KPN did not rely in its POPR on a distinction between service providers and ACSs—much less argue that a service provider or a configuration server at a service provider could not be an ACS.” (Dkt. No. 150, at 6.)

At the October 3, 2023 hearing, the parties presented oral arguments regarding this term.

(b) Analysis

Claim 1 of the ’772 Patent, for example, recites (emphasis added):

1. A system for remote device management comprising:
 - a *plurality of auto-configuration servers (ACSs)*;
 - a manageable electronic device;
 - an auto-configuration server managing device (ACSMD) for controlling access to the *ACSs* communicatively coupled intermediately between the *plurality of ACSs* and the managed electronic device; and
 - at least one database communicatively coupled to the ACSMD and storing information for the identification of electronic devices,
 - wherein the manageable electronic device is configured to send a request for configuration data to the ACSMD,
 - wherein configuration data comprise data for configuring the manageable electronic device, and
 - wherein the ACSMD is configured, responsive to receiving the request, to:
 - identify the manageable electronic device by comparing at least a portion of the request with the information for the identification of electronic devices of the at least one database, and

identify an *ACS* from the *plurality of ACSs* in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device, and

wherein the ACSMD is further configured to relay the request to the identified *ACS*.

In *Samsung*, the Court construed “plurality of auto-configuration servers (ACSs)” to mean “two or more systems of hardware and/or software, each of which is capable of automatically configuring a manageable electronic device.” *Samsung* at 42–46.

As a threshold matter, Plaintiff’s statements to the PTAB are part of the prosecution history and are therefore intrinsic evidence. *Aylus Networks*, 856 F.3d at 1362. Plaintiff distinguished the “Angelot” reference:

[A] “service provider” cannot be equated with a “configuration server” in Angelot, something made clear by Fig. 3a, which shows that a “service provider” may host multiple “configuration servers.” Thus, Petitioner’s interpretation of the “configuration server” in Angelot as the “ACS” of Claims 2–6, 11, 14, and 16 fails to align Angelot’s teaching with “identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device.”

(Dkt. No. 146, Ex. B, June 17, 2023 Patent Owner’s Preliminary Response, at 6.) The patentee further argued:

[E]ach of “service provider[s] 18a and 18b” are shown in FIG. 3a [of Angelot] to include multiple “configuration servers.” This fact, together with the redirection of the request to “an appropriate service provider 18a, 18b or 18c” disclosed in ¶[0054] indicates that there is more to determining the “appropriate configuration server” than finding the MAC address in the “first mapping table.” For example, if a request is redirected to “service provider 18a,” which of the five “configuration servers” shown in FIG. 3a [of Angelot] receives the request?

... Angelot at most might be interpreted as teaching “identify [a service provider] from the plurality of [service providers] in accordance with the identification of manageable electronic device.” If the identified “service provider” happens to be “service provider 18a,” then, according to FIG. 3a [of Angelot], an extra, undisclosed step appears to be required to further identify a “configuration server” from among the five configuration servers in the “first mapping table.” With or without the extra, undisclosed step, this fails to teach limitation [1g]: “identify an ACS from the plurality of ACSs in accordance with the identification of

manageable electronic device to provide configuration data to the manageable device.”

(*Id.*, at 61–63 (citations omitted).)

The patentee thus argued that Angelot did not satisfy the limitation of identifying a configuration server because Angelot involved identifying a service provider that included multiple configuration servers. In other words, identifying one particular service provider in Angelot did *not* identify one particular configuration server.

This prosecution history thus contains no definitive statement that an ACS cannot be at a service provider. *See Omega Eng’g*, 334 F.3d at 1322–23 (declining to add a negative limitation when there was no “express disclaimer or independent lexicography in the written description that would justify adding that negative limitation”).

The Court therefore hereby construes these disputed terms as set forth in the following chart:

<u>Term</u>	<u>Construction</u>
“plurality of auto-configuration servers (ACSs)”	“two or more systems of hardware and/or software, each of which is capable of automatically configuring a manageable electronic device”
“ACS”	“a system of hardware and/or software, which is capable of automatically configuring a manageable electronic device”

9. “controlling access”

“controlling access” (’772 Patent, Claims 1, 10)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“remaining in contact with the manageable electronic device and the ACS, and controlling whether the manageable electronic device gains access” The Court should further instruct the jury that “[c]onstant contact is not required.”	“remaining in contact with the manageable electronic device and the ACS, and controlling whether the manageable electronic device gains access”

(Dkt. No. 134, at 19; Dkt. No. 135, Ex. A, at 15–16; Dkt. No. 146, at 19; Dkt. No. 154, Ex. A, at 18.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “remaining in contact with the manageable electronic device and the ACS, and controlling whether the manageable electronic device gains access.”

(a) The Parties’ Positions

Plaintiff argues that “as this Court recognized—and as the specification demonstrates ‘[c]onstant contact is not required’ to satisfy the ‘controlling access’ limitation.” (Dkt. No. 134, at 20–21.)

Defendants respond that the Court should adopt its prior construction for this term because, “unlike the two previous terms, there is no intervening intrinsic evidence for this term that warrants a modification to the Court’s prior construction.” (Dkt. No. 146, at 19.) Defendants argue that “there is simply nowhere in the intrinsic record that requires the Court to read in the negative ‘constant contact is not required’ limitation KPN proposes.” (*Id.*, at 20.)

Plaintiff replies that “Ericsson does not address any of KPN’s specification citations and arguments,” which “show that, while the ACSMD must remain in contact with the manageable electronic device and ACS to facilitate the transfer of data between them, ‘[c]onstant contact is not required.’” (Dkt. No. 150, at 7 (quoting *Samsung*, 2016 WL 2610649, at *26).)

At the October 3, 2023 hearing, Plaintiff argued that *Samsung* and the intrinsic evidence demonstrate that constant contact is not required. Defendants responded that they are not taking any position on whether constant contact is required, that there is no basis in the intrinsic record to add this negative limitation proposed by Plaintiff, and that Plaintiff’s proposal pertains to a factual question of infringement rather than any legal question for claim construction.

(b) Analysis

Claim 1 of the ’772 Patent, for example, recites (emphasis added):

1. A system for remote device management comprising:
 - a plurality of auto-configuration servers (ACSs);
 - a manageable electronic device;
 - an auto-configuration server managing device (ACSMD) for *controlling access* to the ACSs communicatively coupled intermediately between the plurality of ACSs and the managed electronic device; and
 - at least one database communicatively coupled to the ACSM and storing information for the identification of electronic devices,
 - wherein the manageable electronic device is configured to send a request for configuration data to the ACSMD,
 - wherein configuration data comprise data for configuring the manageable electronic device, and
 - wherein the ACSMD is configured, responsive to receiving the request, to:
 - identify the manageable electronic device by comparing at least a portion of the request with the information for the identification of electronic devices of the at least one database, and
 - identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device, and
 - wherein the ACSMD is further configured to relay the request to the identified ACS.

The parties agree upon a construction for the term “controlling access” but dispute the meaning of “contact” within that otherwise agreed-upon construction. To the extent Plaintiff relies upon *Samsung* as containing a finding that “constant contact is not required,” the Court in *Samsung* merely noted the opinion of Plaintiff’s expert that “network devices ‘function by transmitting and receiving discre[te] . . . packets of data’ such that ‘[c]onstant contact is not required.’” *Samsung* at 52–53. The Court did not determine whether “constant” contact is required. *See id.* at 52–54. The intrinsic evidence does not provide any greater detail regarding the “contact” as a matter of claim construction. The Court’s claim construction here, as in *Samsung*, does not reach whether “constant” contact is required.

The Court therefore rejects Plaintiff’s proposed additional construction, and any remaining disagreement presents a factual dispute regarding infringement rather than any legal question for claim construction. *See PPG*, 156 F.3d at 1355 (“after the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact”); *see also Acumed*, 483 F.3d at 806; *Eon*, 815 F.3d at 1318–19.

The Court therefore hereby construes **“controlling access”** to mean **“remaining in contact with the manageable electronic device and the ACS, and controlling whether the manageable electronic device gains access.”**

VII. DISPUTED TERMS IN U.S. PATENT NO. 9,372,098

The ’098 Patent, titled “Telecommunications Network and Method of Transferring User Data in Signaling Messages from a Communication Unit to a Data Processing Centre,” issued on

June 21, 2016, and bears an earliest priority date of October 28, 2008. The Abstract of the '098

Patent states:

The invention relates to a system and method of transferring user data from a communication module to a data processing center over a telecommunications network. A signalling message is wirelessly received from the communication module in the telecommunications network. The signalling message contains the user data that is subsequently transferred to the data processing center. By inserting the user data in the signalling message(s), it is possible to rapidly transmit data to the telecommunications network, while resources can be saved since it [is] not required to establish a complete circuit-switched or packet-switched connection between the communication module and the telecommunications network. The user data may comprise application data of a program run by the communication module, e.g. alarming data, measurement data or derivatives thereof.

10. Preamble of Claim 17 of the '098 Patent

Plaintiff's Proposed Construction	Defendants' Proposed Construction
The preamble is limiting.	The preamble is limiting and requires a node in a telecommunications network and a communication apparatus, said telecommunications network being configured for transferring data from the communication apparatus to a machine-to-machine server.

(Dkt. No. 134, at 21; Dkt. No. 135, Ex. A, at 17; Dkt. No. 154, Ex. A, at 20.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: "The preamble is limiting and has its plain meaning.

[NOTE: rejecting Defendants' proposal of requiring 'a communication apparatus'.]"

(a) The Parties' Positions

Plaintiff argues that "contrary to Ericsson's construction, the fact that the preamble describes the node as having to be able to operate in a network environment that includes a communication apparatus does not mean that a communication apparatus is a required element."

(Dkt. No. 134, at 21.)

Defendants respond that “[e]choing KPN’s disclaimer [in statements to the PTAB], Ericsson’s proposed construction properly encapsulates KPN’s unequivocal statement that the claim ‘requires . . . a communication apparatus.’” (Dkt. No. 146, at 21; *see id.*, at 20.)

Plaintiff replies that there was no disclaimer, that “Ericsson admits that the preamble does not require a communication apparatus,” and that “Ericsson cites no support for its position that a patentee can *add* new limitations through POPR statements.” (Dkt. No. 150, at 7.) Further, Plaintiff argues: “KPN’s POPR statements (which addressed multiple independent claims) clearly were directed to *the capabilities* of the communication apparatus with which the claimed node must be able to operate. Simply put, if the reference did not disclose a communication apparatus with the required attributes, then it did not disclose a node able to operate with such an apparatus.” (*Id.*, at 8.)

At the October 3, 2023 hearing, Defendants reiterated their argument that Plaintiff in IPR proceedings definitely stated that the “communication module” is an affirmative claim requirement (without any indication that Plaintiff was referring to the “communication module” merely being part of the purported environment in which the claimed invention operates). Plaintiff responded that distinguishing the cited reference as lacking disclosure of the claimed communication module does *not* mean that Defendants can add a new limitation to the claim.

(b) Analysis

Claim 17 of the ’098 Patent recites (emphasis added):

17. A *node in a telecommunications network*, said telecommunications network being configured for transferring data from a *communication apparatus* to a machine-to-machine server, said node being [*sic*] comprising:
 one or more processors for carrying out operations including:
 receiving a wireless signalling message from said communication apparatus, said received wireless signalling message having inserted in it non-signalling application data generated for a machine-to-machine function by the communication apparatus, wherein wireless signalling messages of the

telecommunications network are of a message type specified for carrying signalling data for managing connections in the telecommunications network;
 retrieving said non-signalling application data from the received wireless signalling message; and
 terminating further transmission of the received wireless signalling message and transferring said retrieved non-signalling application data to said machine-to-machine server.

The parties agree that the preamble is limiting. The parties dispute whether the recited “telecommunications network” includes “a communication apparatus” or whether the “communication apparatus” is merely part of the network environment. *See HTC Corp. v. ICom GmbH & Co., KG*, 667 F.3d 1270, 1274 (Fed. Cir. 2012) (“mobile station for use with a network including a first base station and a second base station that achieves a handover from the first base station to the second base station by” six recited functions); *id.* at 1277 (“The claim language and the specification provide ample support for the conclusion that the six enumerated functions are part of the *network environment* and are not method steps.”) (emphasis added).

A fair reading of the recital of a telecommunications network “being *configured* for transferring data from a communication apparatus” is that the telecommunications network and the recited “node in a telecommunications network” are configured to *interact with* a “communication apparatus.”

Defendants cite IPR proceedings in which Plaintiff distinguished the “Krc0” reference, arguing that “[a]ll [Petition] grounds fail because Krc0 does not teach or disclose the claimed ‘communication module’”:

Each independent claim *requires a communication module/apparatus/device* configured to do two things: (1) generate ‘non-signalling application data’ and “(2) transmit ‘wireless signalling message’ containing the ‘non-signalling application data’ to a telecommunications node.

(Dkt. No. 146, Ex. D, June 16, 2023 Patent Owner Preliminary Response at 34–35 (footnote omitted; emphasis added); *see id.* at 34–49.)

Defendants argue that these statements demonstrate that the claim affirmatively requires a communication module, but an equally reasonable (if not more reasonable) reading is that Plaintiff was discussing requirements regarding the “communication module” with which the “telecommunications network” interacts. No relevant disclaimer is apparent. *See Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004) (“Because the statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term”) (citation omitted); *see also Tech. Props. Ltd. LLC v. Huawei Techs. Co., Ltd.*, 849 F.3d 1349, 1357–58 (Fed. Cir. 2017) (“If the challenged statements are ambiguous or amenable to multiple reasonable interpretations, prosecution disclaimer is not established.”) (citation omitted).

Moreover, as additional authority separately weighing against Defendants’ proposal, Plaintiff persuasively submits authority that “[a]lthough statements in a file history may of course be used to explain and potentially limit the meaning of claim limitations, they cannot be used to add an entirely new limitation to the claim.” *Regents of Univ. of Minnesota v. AGA Med. Corp.*, 717 F.3d 929, 945 (Fed. Cir. 2013) (citations and internal quotation marks omitted).

The Court therefore finds that the preamble is limiting (as the parties agree), and the Court expressly rejects Defendants’ proposed construction. No further construction is necessary. *See 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., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008); *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 Commc’ns, 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); *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 977–79 (Fed. Cir. 2021).

The Court therefore hereby finds that the preamble of Claim 17 of the ’098 Patent is limiting and has its **plain meaning**.

11. “said node”

“said node” (’098 Patent, Claim 17)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“node in a telecommunications network”	“one or more nodes, each of which must perform the receiving, retrieving, terminating, and transferring functions”

(Dkt. No. 134, at 22; Dkt. No. 135, Ex. A, at 18; Dkt. No. 146, at 21; Dkt. No. 154, Ex. A, at 21.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “one or more nodes, each of which must perform the receiving, retrieving, terminating, and transferring functions.”

(a) The Parties’ Positions

Plaintiff argues that “[a]s the preamble reflects, ‘said node’ refers simply to the introductory phrase ‘[a] node in a telecommunications network,’” and “[i]t in no way requires that, to the extent there are multiple nodes, each must perform all recited functions.” (Dkt. No. 134, at 22.) Plaintiff also argues that “[b]ecause Ericsson’s construction would exclude th[e] Figure 2] embodiment (and many others, including those depicted in FIGS. 2A, 3A, and 3B), it is wrong and should be rejected.” (*Id.*, at 23 (citation omitted).)

Defendants respond that “Ericsson’s proposed construction for ‘said node’ mirrors the Court’s construction of ‘said microprocessor’ in *Salazar v. AT&T Mobility LLC*, which was recently affirmed on appeal by the Federal Circuit. (Dkt. No. 146, at 21 (citing No. 2:20-CV-00004, Dkt. No. 131, 2020 WL 5608640 (E.D. Tex. Sept. 18, 2020), *aff’d*, 64 F.4th 1311 (Fed. Cir. 2023)).) Defendants also argue that Plaintiff’s reliance on a particular disclosed embodiment is unavailing because a claim construction need not encompass all embodiments and, indeed, “[o]ther claims in the ’098 Patent are not limited to a single node that performs the receiving, retrieving, terminating, and transferring functions.” (Dkt. No. 146, at 23.)

Plaintiff replies that “[t]he claims provide just a simple listing of functions—each one described as being performed by ‘one or more processors,’” and “[c]ombined with the fact that Ericsson does not dispute that the specification describes the four functions as being performed by different processors within the system, these realities demonstrate[] that Ericsson’s construction is wrong.” (Dkt. No. 150, at 8 (citation and footnote omitted).)

At the October 3, 2023 hearing, Plaintiff argued that Defendants’ proposed construction would exclude the disclosed embodiments. Plaintiff cited *01 Communique Lab., Inc. v. LogMeIn, Inc.*, 687 F.3d 1292, 1297 (Fed. Cir. 2012), for the proposition that “a” means one or more and that subsequent uses of “the” or “said” reinvoke this meaning of one or more. Defendants responded that the embodiments cited by Plaintiff do not involve the non-signalling application data that is required by this claim.

(b) Analysis

Claim 17 of the ’098 Patent recites (emphasis added):

17. *A node in a telecommunications network*, said telecommunications network being configured for transferring data from a communication apparatus to a machine-to-machine server, *said node* being [*sic*] comprising:
 one or more processors for carrying out operations including:

receiving a wireless signalling message from said communication apparatus, said received wireless signalling message having inserted in it non-signalling application data generated for a machine-to-machine function by the communication apparatus, wherein wireless signalling messages of the telecommunications network are of a message type specified for carrying signalling data for managing connections in the telecommunications network;

retrieving said non-signalling application data from the received wireless signalling message; and

terminating further transmission of the received wireless signalling message and transferring said retrieved non-signalling application data to said machine-to-machine server.

Plaintiff argues that the specification discloses that the recited functions can be “divvied across distinct network nodes (i.e., components) such that no single node performs all of the recited functions.” (Dkt. No. 134, at 22 (emphasis omitted); *see* ’098 Patent at 7:9, 7:19–35 & Fig. 2B.)

Even assuming (without deciding) that Plaintiff is correct about the specification, the claim requires a particular node, “said node,” itself having one or more processors for carrying out the recited operations. *See Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015) (regarding “said one or more pre-processing parameters,” finding that “[t]he use of the term ‘said’ indicates that this portion of the claim limitation is a reference back to the previously claimed ‘preprocessing parameters’”); *see also In re Varma*, 816 F.3d 1352, 1363 (Fed. Cir. 2016) (“For a dog owner to have ‘a dog that rolls over and fetches sticks,’ it does not suffice that he have two dogs, each able to perform just one of the tasks.”); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1342 (Fed. Cir. 2016) (regarding “a logical table,” finding that the limitations at issue were required to be “in the same logical table”); *Salazar v. AT&T Mobility LLC*, No. 2:20-CV-00004, Dkt. No. 131, 2020 WL 5608640, at *18–*19 (E.D. Tex. Sept. 18, 2020), *aff’d*, 64 F.4th 1311, 1317 (Fed. Cir. 2023) (“We agree with the district court that while the claim term ‘a microprocessor’ does not require there be only one microprocessor, the subsequent limitations

referring back to ‘said microprocessor’ require that at least one microprocessor be capable of performing each of the claimed functions. This approach is entirely consistent with our precedent.”); *id.* at 1315–18.

Finally, Plaintiff argues in its reply brief that the claim allows for “one or more processors” to perform the recited operations (Dkt. No. 150, at 8), such that different operations could be performed by different processors. But Defendants do *not* propose that all recited operations must be performable by one *processor*. Rather, Defendants propose that all recited operations must be performable by one *node*. The above-reproduced claim language, read in light of the above-cited authorities, supports Defendants’ proposed construction.

The Court therefore hereby construes “**said node**” to mean “**one or more nodes, each of which must perform the receiving, retrieving, terminating, and transferring functions.**”

12. “non-signalling application data”

“non-signalling application data” (’098 Patent, Claims 17, 20)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“data that is not concerned with the establishment and control of connections, and with management, in a telecommunications network”	“data that is neither associated with a particular subscriber’s connection nor used for setting up, maintaining or ending connections. Information about signals and about devices does not constitute non-signalling application data.”

(Dkt. No. 134, at 23–24; Dkt. No. 135, Ex. A, at 19; Dkt. No. 146, at 23; Dkt. No. 154, Ex. A, at 21–22.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “data that is not concerned with the establishment and control of connections, and with management, in a telecommunications network.”

(a) The Parties' Positions

Plaintiff argues that “[t]he term at issue is one of art,” that “the specification refers to various 3GPP standards as describing different ‘signalling messages,’ including TS 24.008,” and that KPN thus turned to the definitional 3GPP standard (3GPP TR 21.905) for its proposed construction.” (Dkt. No. 134, at 24 (citations omitted).) Plaintiff also argues that Defendants’ proposal lacks support, and “[i]n particular, Ericsson’s final negative limitation that ‘[i]nformation about signals and about devices does not constitute non-signalling application data’ has no basis in the claims, specification, prosecution history, or *inter partes* review proceedings and squarely conflicts with the patent’s teaching that ‘application data’ includes, ‘e.g. alarming data, measurement data or derivatives thereof,’ including ‘status information’ about the device itself.” (*Id.*, at 25 (citation omitted).) Plaintiff urges that “because KPN never unequivocally disclaimed the plain and ordinary meaning of non-signalling application data shown by the patent and 3GPP TR 21.905 V8.6.0, and because—unlike Ericsson’s construction—KPN’s construction is consistent both with the specification and the entirety of KPN’s statements to the PTAB and the Examiner, the Court should reject Ericsson’s construction and adopt KPN’s.” (*Id.*, at 26 (citations omitted).)

Defendants respond that “[d]uring prosecution of the ’098 Patent, KPN advanced an extremely narrow interpretation of ‘non-signalling application data’ to overcome the Examiner’s rejection of the pending claims based on the ‘Domm’ reference,” and then, during IPR proceedings, “[t]o overcome [the ‘Krc’ reference], KPN pointed to the very same prosecution history outlined above to further narrow the scope of its claims” (Dkt. No. 146, at 24–25.) Defendants urge that “KPN’s proposed construction should be rejected because it does not reflect the full scope of KPN’s disclaimers.” (*Id.*, at 26.)

Plaintiff replies that “Ericsson again relies on an inaccurate and incomplete recitation of KPN’s prosecution history and IPR statements.” (Dkt. No. 150, at 9.)

At the October 3, 2023 hearing, the parties submitted this disputed term on the briefing without oral argument.

(b) Analysis

Claim 17 of the ’098 Patent recites (emphasis added):

17. A node in a telecommunications network, said telecommunications network being configured for transferring data from a communication apparatus to a machine-to-machine server, said node being [*sic*] comprising:

one or more processors for carrying out operations including:

receiving a wireless signalling message from said communication apparatus, said received wireless signalling message having inserted in it *non-signalling application data* generated for a machine-to-machine function by the communication apparatus, wherein wireless signalling messages of the telecommunications network are of a message type specified for carrying signalling data for managing connections in the telecommunications network;

retrieving said *non-signalling application data* from the received wireless signalling message; and

terminating further transmission of the received wireless signalling message and transferring said retrieved *non-signalling application data* to said machine-to-machine server.

The specification discloses that the “invention relates to the field of data transfer over a telecommunications network.” ’098 Patent at 1:17–18. The specification refers to various 3GPP standards as describing different “signalling messages,” including TS 24.008. *See* ’098 Patent at 2:45–54 & 9:15–25.

The 3GPP standard referred to by the specification defines “signalling” as:

The exchange of information specifically concerned with the establishment and control of connections, and with management, in a telecommunications network.

(Dkt. No. 134, Ex. 13, 3GPP TR 21.905 V8.6.0 at 25.)

During prosecution, the patentee distinguished the “Domm” reference, arguing:

[T]he Examiner summarily cited to paragraphs 0039, 0042, 0045, 0049, and Figures 3–6 of Domm and stated that “the claimed limitation is equivalent to the extracted data of IMSI, PTMSI, TLLI, and RAI within the attach request message [and that] it is necessary for MS 301 to have a ‘program run by the communication module being contained’ and for the attach request message to be part of a ‘program run by the communication module’ which allows MS 301 to send an attach request message.” (Office Action, pg. 14, ll. 14–19). However, none of these parameters (i.e., IMSI, PTMSI, TLLI, and RAI) disclosed in Domm amount to “application data of a program run by the communication module” as recited in Claim 1.

As understood by a person of ordinary skill in the art, the well-known Open Systems Interconnection (OSI) model partitions functions of a communication system into multiple abstraction layers. Among these layers are a network layer and an application layer. The network layer provides switching and routing functionality (i.e., connectivity between two nodes in the same network), while the conceptually higher-level application layer supports software applications and end-user processes. As described in Domm, the IMSI, PTMSI, TLLI, and RAI parameters *are used for setting up, maintaining or ending connections between nodes in the same network*. Accordingly, at best the parameters disclosed in Domm amount to network data, but certainly not to application data as recited in claim 1.

(Dkt. No. 134, Ex. 15, Sept. 5, 2013 Response, at 11 (emphasis added).) The patentee thus distinguished parameters that are for “setting up, maintaining or ending connections.” (*Id.*)

The patentee later amended the claims to add “non-signalling.” (Dkt. No. 146, Ex. G, May 21, 2015 Response to Final Office Action Mailed December 15, 2014, at 2–9.) The patentee again distinguished Domm, arguing:

Domm discloses (paragraph 0034) a serving GPRS support node (SGSN) 303 that receives a particular type of signalling message, namely an attach request message from a mobile station (MS) 301. Further Domm discloses extracting four types of data from the attach request message, namely an International Mobile Security Identity (IMSI), a Temporary Mobile Packet Subscriber Identity (PTMSI) for a packet network, a Temporary Logical Link Identity (TLLI), and a Routing Area Id (RAI). As explained in Applicants’ Response filed February 4, 2014, Domm expressly teaches that these data are “parameters that may be associated with a particular subscriber’s connection.” Applicants therefore submit that the signalling message of Domm, like that of Johan, also does not have “inserted in it non-signalling application data generated for a machine-to-machine function by the communication module.”

(*Id.*, at 12.)

More recently, in IPR proceedings, Plaintiff stated:

“[S]ignalling data” includes “both information ‘about signals’ (e.g., message type) and ‘about devices’ (e.g., mobile identity, location), so long as that information is used to establish, control and/or manage connections in a telecommunication network.”

* * *

As shown [in Plaintiff’s May 21, 2015 Response to Final Office Action], Patent Owner argued that information about a device (e.g., International Mobile Security Identity) and about a signal (e.g., Temporary Logical Link Identity) did not constitute ‘non-signalling application data.’

(Dkt. No. 146, Ex. D, June 16, 2023 Patent Owner Preliminary Response, at 12 & 15.)

Defendants do not identify any definitive statement by Plaintiff that information “about a device” never constitutes non-signalling application data. (*See id.*). For example, distinguishing IMSI and referring to it as “information about a device” did *not* amount to a disclaimer of *all* information about a device. *See Omega Eng’g*, 334 F.3d at 1324 (“prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on *definitive* statements made during prosecution”) (emphasis added); *see also id.* at 1325–26.

Also in IPR proceedings, Plaintiff further stated:

Patent Owner’s Preliminary Response (Paper 6, “POPR”) proves Petitioner is wrong. Whether data is “*non-signalling*” does not turn on whether the data is “about a signal”; it instead turns on whether the data is “concerned with the establishment and control of connections, and with management, in a telecommunications network.” POPR, 6 (citing Ex. 2003, 25) (evidencing the established meaning of “signalling”). Thus, any data—whether “about a signal” and/or “about a device”—qualifies as “signalling data” if it meets that definition. *Id.*

(Dkt. No. 134, Ex. 18, July 17, 2023 Patent Owner’s Authorized Brief Addressing Petitioner’s Proposed Claim Constructions in the Parallel Litigation, at 1.)

Also, Plaintiff persuasively cites disclosure that “application data” can include “status information” about devices such as “sensors, meters, coffee machines etc.” ’098 Patent at 1:36–42; *see id.* at 1:59–2:16.

Further of note, the PTAB recently found that Plaintiff’s interpretation is consistent with the 3GPP definition as well as with the rest of the record before the PTAB. (Dkt. No. 134, Ex. 14, IPR 2023-00524, Paper 13, Aug. 21, 2023 Decision Denying Institution of *Inter Partes* Review, at 10–11; *see id.*, at 29.) Defendants argue that “the Board expressly adopted KPN’s disclaimer in its decision denying institution of inter partes review,” but this is not apparent in the portions cited by Defendants. (*See* Dkt. No. 146, at 25 (citing Dkt. No. 146, Ex. H, Aug. 21, 2023 Decision, at 24–25).)

Finally, because the term here at issue involves “non-signalling” rather than “signalling,” the Court changes Plaintiff’s proposals of “and” to “or” to be consistent with Plaintiff’s arguments and the above-discussed evidence.

The Court therefore hereby construes **“non-signalling application data”** to mean **“data that is not concerned with the establishment or control of connections, or with management, in a telecommunications network.”**

13. “communication apparatus”

“communication apparatus” (’098 Patent, Claims 17, 20)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	“device configured to (1) generate non-signalling application data and (2) transmit a wireless signalling message containing the non-signalling application data to a telecommunications node”

(Dkt. No. 134, at 26; Dkt. No. 135, Ex. A, at 20; Dkt. No. 146, at 27; Dkt. No. 154, Ex. A, at 23.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Plain meaning.”

(a) The Parties’ Positions

Plaintiff argues that “Ericsson’s construction should be rejected as duplicative of the express claim requirements.” (Dkt. No. 134, at 26.)

Defendants respond that “Ericsson’s proposed construction of ‘communication apparatus’ is tied to KPN’s clear and unmistakable disclaimer regarding the required elements of Claim 17.” (Dkt. No. 146, at 27.)

Plaintiff replies: “Ericsson does not even attempt to explain how its construction is not duplicative of the express claim requirements. As such, it should be rejected.” (Dkt. No. 150, at 9.)

At the October 3, 2023 hearing, the parties submitted this disputed term on the briefing without oral argument.

(b) Analysis

Claims 17 and 20 of the ’098 Patent recite (emphasis added):

17. A node in a telecommunications network, said telecommunications network being configured for transferring data from a *communication apparatus* to a machine-to-machine server, said node being [*sic*] comprising:

one or more processors for carrying out operations including:

receiving a wireless signalling message from said *communication apparatus*, said received wireless signalling message having inserted in it non-signalling application data generated for a machine-to-machine function by the *communication apparatus*, wherein wireless signalling messages of the telecommunications network are of a message type specified for carrying signalling data for managing connections in the telecommunications network;

retrieving said non-signalling application data from the received wireless signalling message; and

terminating further transmission of the received wireless signalling message and transferring said retrieved non-signalling application data to said machine-to-machine server.

* * *

20. The node of claim 17, wherein the telecommunications network is configured for transferring non-signalling application data from the *communication apparatus* to the machine-to-machine server in a machine-to-machine communications setting; and

wherein transferring said non-signalling application data to said machine-to-machine server comprises transferring said non-signalling application data to said machine-to-machine server, while avoiding to establish a complete circuit-switched or packet-switched connection between said *communication apparatus* and said telecommunications network.

Defendants cite IPR proceedings in which Plaintiff distinguished the “Krcro” reference, arguing that:

Each independent claim requires a communication module/apparatus/device configured to do two things: (1) generate ‘non-signalling application data’ and “(2) transmit ‘wireless signalling message’ containing the ‘non-signalling application data’ to a telecommunications node.

(Dkt. No. 146, Ex. D, June 16, 2023 Patent Owner Preliminary Response at 34–35 (footnote omitted).)

Defendants’ proposal of “device configured to (1) generate non-signalling application data and (2) transmit a wireless signalling message containing the non-signalling application data to a telecommunications node” resembles Plaintiff’s above-reproduced statements in IPR proceedings, but essentially the same language already appears in Claim 17 (reproduced above). Defendants do not persuasively demonstrate any need for their proposed substitution of language.

The Court therefore expressly rejects Defendants’ proposed construction, and no further construction is necessary. *See 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; *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes “**communication apparatus**” to have its **plain meaning**.

VIII. DISPUTED TERMS IN U.S. PATENT NO. 10,924,500

The ’500 Patent, titled “System to Detect Behaviour in a Telecommunications Network,” issued on February 16, 2021, and bears an earliest priority date of November 22, 2012. The Abstract of the ’500 Patent states:

A system is provided for detecting behaviour of a mobile telecommunications device in a telecommunications network. Malware in mobile devices can cause malicious behaviour in the device, for example sequential attaching and detaching of an infected device relative to a telecommunications network. A telecommunications network is provided which is configured to identify at least one mobile telecommunications device and to receive signals from the mobile telecommunications device and process the signals into data streams. The data streams include data of a first type arranged to cause an event of a first type within the telecommunications network. The network is arranged to monitor an occurrence in the data streams of the data of the first type and to register when the occurrence exceeds a level indicating acceptable behaviour of the mobile telecommunications device in the telecommunications network. A device for detection of mobile device behaviour is also described.

14. “normal processing of signals”

“normal processing of signals” (’500 Patent, Claims 1, 10)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite.

(Dkt. No. 134, at 27; Dkt. No. 135, Ex. A, at 21; Dkt. No. 146, at 27; Dkt. No. 154, Ex. A, at 24.)

Shortly before the start of the October 3, 2023 hearing, the Court provided the parties with the following preliminary construction: “Plain meaning.”

(a) The Parties' Positions

Plaintiff argues that in light of the context provided by the specification, “it is simply not credible that a POSITA would lack reasonable certainty as to the meaning of this term,” and Plaintiff submits that Defendants’ expert in IPR proceedings had no difficulty applying this term. (Dkt. No. 134, at 29 (citation omitted).) Plaintiff also submits that “the baseline is whether the relevant predetermined signal is being exchanged to perform telecommunications operations or solely to try to detect malicious activity,” and “[i]f the signal is being exchanged to facilitate a telecommunications function, then it satisfies the requirement that there be a ‘predetermined signal representing an interaction between network devices in the core network *for normal processing of signals.*’” (Dkt. No. 134, at 30 (citations omitted).)

Defendants respond that this is a “purely subjective term,” that “[t]his phrase has no ordinary and customary meaning in the art,” and that “the ’500 Patent does not provide any objective standard for determining when a ‘certain predetermined signal represent[s] an interaction between network devices in the core network for normal processing of signals.’” (Dkt. No. 146, at 27.) Defendants also argue that “KPN’s own experts disagree about the meaning of the claims.” (*Id.*) Finally, Defendants argue:

[E]ven if the Court were to accept KPN’s plain meaning, the claim is indefinite. KPN would have a POSITA solve a puzzle: remove “the ’500 invention” and look at whether the monitored signal remains. The answer is self-contradictory. If the monitored signal *remains* after *removing* the invention, then it *is part of the invention* that was removed. If the monitored signal does *not* exist after removing the invention, then it is *not* part of the invention.

(*Id.*, at 28 (citing Dkt. No. 134, at 28–30).)

Plaintiff replies: “Ericsson first argues that there is some inconsistency between the opinions of KPN’s experts. Not so. Both experts had no trouble understanding (and pointing to) the same exemplary signals as ‘amenable to normal signal processing, such as attach request

signals and handover signals.’” (Dkt. No. 150, at 10 (citations omitted).) Plaintiff further argues that its expert “plainly confirms that an objective measure exists: If the signal would be exchanged to facilitate a telecommunications function (like handover) even absent the implementation of the invention, it satisfies the limitation.” (*Id.* (citation omitted).)

At the October 3, 2023 hearing, the parties presented oral arguments regarding this term.

(b) Analysis

Claims 1 and 10 of the ’500 Patent recite (emphasis added):

1. A system comprising:

a telecommunications network configured to identify mobile telecommunications device and comprising a core network and a base station, wherein the base station is configured to receive radio signals from the mobile telecommunications device and further process the radio signals into processed signals and to transmit the processed signals to the core network,

wherein the telecommunications network is arranged to count in the core network a number of occurrences of a certain predetermined signal associated with the mobile telecommunications device, the certain predetermined signal representing an interaction between network devices in the core network for *normal processing of signals*,

and wherein the telecommunications network is further arranged to register when the number of occurrences of the certain predetermined signal exceeds a level indicating acceptable behaviour of the mobile telecommunications device in the telecommunications network,

wherein the certain predetermined signal indicates handover of the mobile telecommunications device.

* * *

10. The system according to claim 1, wherein the telecommunications network is further configured to:

identify at least one additional mobile telecommunications device,
receive radio signals from the at least one additional mobile telecommunications device and to process these radio signals into processed signals and to transmit the processed signals to the core network,

count in the core network a number of occurrences of a certain predetermined signal associated with the at least one additional mobile telecommunications device, the certain predetermined processed signal representing an interaction between network devices for *normal processing of signals*,

register when the number of occurrences of a certain predetermined signal associated with the at least one additional mobile telecommunications device exceeds a level indicating acceptable behaviour of the at least one additional mobile telecommunications device within the telecommunications network,

wherein the telecommunications network is further arranged to aggregate registered data of the mobile telecommunications device and the at least one additional mobile telecommunications device,

and wherein the certain predetermined signal associated with the at least one additional mobile telecommunications device indicates handover of the at least one additional mobile telecommunications device.

The specification refers to the “normal processing of signals”:

The network can therefore detect malicious behaviour by monitoring the occurrence in the data streams in the network of data of a first type, typically a predetermined type which represents some interaction in the network between network devices for the *normal processing of signals*.

’500 Patent at 3:35–39 (emphasis added).

The specification is framed in the context of detecting “malicious behaviour” (*id.* at Abstract; *see id.* at 2:31–3:15 (discussing malware)), and the phrase “normal processing” can be readily understood as referring to processing that is for something other than detecting malicious behavior. *See id.* at 7:28–29 & 8:28–29 (“In parallel with the normal processing of the attach request . . .”). The specification provides several examples of processing that is not for the purpose of detecting malicious behavior. *See id.* at 2:23–30 (“monitoring the data streams”), 3:16–34, 3:47–53, 5:48–54 (“existing handover algorithms”) & 6:62–7:20 (routing of calls). The opinions of Plaintiff’s expert are further persuasive. (*See* Dkt. No. 134, Ex. 6, July 18, 2023 Williams Decl. at ¶¶ 72 & 85–86.)

The term is therefore not merely subjective. *See Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1350 (Fed. Cir. 2005). The contrary opinions of Defendants’ expert are unpersuasive. (*See* Dkt. No. 134, Ex. 9, van der Weide Decl., at ¶ 31 (term “is subjective

because a system designer decides which types of signal processing are needed and may be considered ‘normal’ for the particular system under consideration”); *see also id.* at ¶ 36.)

Moreover, even if any doubt remained as to the reasonable clarity of the disputed term, the claims themselves provide further clarity by reciting that the “certain predetermined signal” indicates “handover” of the mobile telecommunications device. *See* ’500 Patent, Cls. 1, 10 (reproduced above).

Finally, at the October 3, 2023 hearing, Defendants emphasized their argument that the opinion of Plaintiff’s expert in the present case, Dr. Williams, is inconsistent with the opinion of Plaintiff’s expert in IPR proceedings, Dr. Ding. The opinion of Dr. Ding, however, involved distinguishing between “data” and “predetermined signals” rather than between “normal” signals and something else. (*See* Dkt. No. 146, Ex. J, July 10, 2023 Ding Decl., at ¶ 54 (“[T]he ’500 Patent does disclose embodiments where the number of handover events for a mobile station is determined based on *data* generally. However, a POSITA would understand that the claims are not directed toward those embodiments. Rather, the claims are directed toward embodiments that count a *certain predetermined signal* that are subject to the *normal processing of signals*.”) (citations omitted); *see id.*, at ¶¶ 50–54.) No inconsistency is apparent between Dr. Ding’s opinion and Dr. William’s opinion. (*Compare id. with* Dkt. No. 134, Ex. 6, July 18, 2023 Williams Decl., at ¶ 83.)

The Court therefore rejects Defendants’ indefiniteness argument. Defendants present no alternative proposed construction, and no further construction is necessary.

The Court accordingly hereby construes “**normal processing of signals**” to have its **plain meaning**.

IX. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit.

The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 14th day of October, 2023.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE