

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

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|-----------------------------|---|-----------------|
| EON CORP. IP HOLDINGS, LLC, | § | |
| | § | |
| v. | § | NO. 6:09-cv-116 |
| | § | |
| SENSUS USA INC., et al. | § | |

MEMORANDUM OPINION & ORDER

This claim construction opinion construes the disputed terms in U.S. Patent Nos. 5,388,101 (“the ‘101 Patent”) and 5,481,546 (“the ‘546 Patent”). For the reasons stated herein, the Court adopts the constructions set forth below.

BACKGROUND

Plaintiff Eon Corp. IP Holdings, LLC (“Plaintiff”) alleges Defendants Sensus USA Inc. (“Sensus”) and Bell Industries, Inc. (“Bell”) (collectively, “Defendants”) infringe the ‘101 and ‘546 Patents. Co-pending before the Court is a related case, *EON Corp. IP Holdings, LLC v. Verizon Clinton Center Drive*, 6:08-cv-385 (“the *Verizon* case”). The parties have presented extensive claim construction briefing.

The Court was scheduled to hold a *Markman* hearing in the *Verizon* case (“the *Verizon Markman*”) three months earlier than in this case. In advance of that hearing, Sensus requested, and the Court granted, leave to brief certain claim terms that were common to the two cases (Doc. Nos. 116, 121). The Court further granted Sensus leave to be heard at the *Verizon Markman* (Doc. No. 126). Pursuant to the Court’s orders, Sensus submitted an initial brief on claim terms in common with the *Verizon* case (Doc. No. 124) (“SENSUS VERIZON BR.”) and Plaintiff responded to it (Doc. No. 131) (“PL.’S VERIZON RESP.”). On March 3, 2010, the Court held the *Verizon Markman* hearing and heard argument (Case No. 6:08-cv-385, Doc. Nos. 300, 308). Following that hearing, the Court

granted Sensus and Plaintiff leave to file supplemental briefing regarding the term “portable” (Doc. No. 142, 143, 147) (“SENSUS PORTABLE BR.” and “PL.’S PORTABLE RESP.”).

On April 23, 2010, Plaintiff filed its opening claim construction brief in this case (Doc. No. 157) (“PL.’S BR.”). Sensus and Bell filed independent responses (Doc. Nos. 159, 162) (“SENSUS RESP.” and “BELL RESP.”). Plaintiff filed a reply, jointly addressing both responses (Doc. No. 167) (“PL.’S REPLY”). On June 10, 2010, the Court held a claim construction hearing and heard argument (Doc. No. 183). Pursuant to the Court’s comments during that hearing, the Court ordered supplemental briefing regarding the reexamination file (Doc. Nos. 180, 185, 192) (“SENSUS REEXAM BR.” and “PL.’S REEXAM RESP.”).

CLAIM CONSTRUCTION PRINCIPLES

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

Claim language guides the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other

claims, asserted and unasserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

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

The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elan Computer Group, Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and

examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent”). The well established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton, Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1998) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

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

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

When claim construction involves means-plus-function limitations, the Court must identify the claimed function and the corresponding structure that performs that function. *Applied Medical Resources Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). The Court’s construction of the function must include only the limitations in the claim language. *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002). “Ordinary principles of claim construction govern the interpretation of the claim language used to describe the function.” *Id.* The Court must then determine if the specification discloses a structure that performs the claimed function and is clearly associated with the performance of the function. *Id.*

DISCUSSION

A. Overviews of the Patents-in-Suit

As the ‘546 Patent is a continuation of the ‘101 Patent, the patents are essentially identical except for the claims themselves. The patents “relate[] to an interactive two-way data service network for conveying synchronously timed digital messages point to point through the network.” ‘101 Patent at 1:8-10. The invention was directed at facilitating long distance communication with subscriber units of maximum effective radiated power under twenty watts on the Federal Communication Commission (“FCC”) authorized 218-219 MHz band. *Id.* at 1:28-35. The network consists of “portable subscriber units of milliwatt transmitting power capacity,” *id.* at 3:35-36, base

stations capable of transmitting data to the subscriber units, *id.* at 3:62-65, and “receive only stations” that relay communications from the subscriber units to the base stations. *Id.* at 3:65-4:2.

Figure 2 illustrates an exemplary base station site:

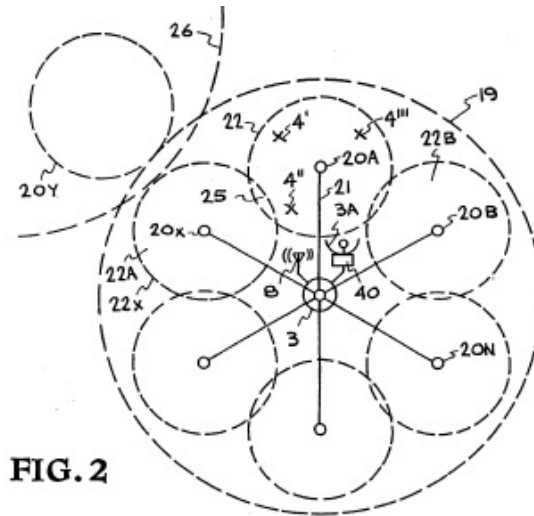


FIG. 2

The base station 3 is located at the center of a local area territory, delineated by ring 19. *Id.* at 5:40-47. Subscriber units x 4, 4', etc are distributed throughout the local area territory. *Id.* at 5:54-6:4. As the subscriber units transmit at a lower power than the base station, remote receive-only relay stations 20A-20N are positioned at strategic locations within the territory to relay communications from the subscriber units to the base station. *Id.*

Plaintiff accuses Bell of literally infringing claims 1, 2, 3, and 5-14 of the '546 Patent and infringing claim 4 of the '546 Patent under the doctrine of equivalents. PL.'s BR. at 2. Plaintiff also accuses Bell of literally infringing claims 1, 2, 3, 8, 9, and 12-20 of the '101 Patent and infringing claims 4-7, 10, and 11 under the doctrine of equivalents. *Id.* Plaintiff accuses Sensus of literally infringing claims 1-3 and 5-14 of the '546 Patent and claims 1-3, 8, 9, 12, and 16-18 of the '101

Patent. *Id.* Plaintiff further accuses Sensus of infringing claims 4-6 and 10 of the ‘101 Patent under the doctrine of equivalents. *Id.*

B. Disputed Terms

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|---|--|--|---|
| <p>interactive video network ‘101 Patent, Claims 1-15 ‘546 Patent, Claim 1</p> | <p>Preamble not limiting; no construction necessary.</p> | <p>A network combining television broadcast and subscriber communications in which subscribers receive and respond to inquiries related to the television broadcast.</p> | <p>A network combining television broadcast and real time communications between subscribers.</p> |
| <p>interactive video network system ‘101 Patent, Claims 16-18 ‘546 Patent, Claims 2-13</p> | | <p>Alternate Proposal: a network combining video broadcast and subscriber communications in which subscribers interact.</p> | <p>Alternate Proposal: An Interactive Video and Data Services (IVDS) system as defined in Subpart F of Part 95 of the rules of Federal Communications Commission, 47 C.F.R. §§ 95.801 et seq. (1992).</p> |
| <p>interactive video data system ‘101 Patent, Claims 19-20</p> | | | |

Plaintiff incorporates by reference its briefing in the *Verizon* case (Case No. 6:08-cv-385, Doc. Nos. 270, 280, 281) and this case (Doc. Nos. 147, 148, 156).¹ In sum, Plaintiff contends the preamble is not limiting. Likewise, Sensus incorporates its *Verizon* case brief (Doc. No. 124) and Bell incorporates the defendant briefing in the *Verizon* case (Case No. 6:08-cv-385, Doc. Nos. 273, 274, 285).

“[A] preamble is not limiting ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’”

¹ Presumably, Plaintiff also intended to incorporate PL.’S VERIZON RESP. (Doc. No. 131).

Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002). However, the preamble to a claim is “given the effect of a limitation” when it is “considered necessary to give life, meaning, and vitality to the claims.” *Kropa v. Robie*, 187 F.2d 150, 152 (C.C.P.A. 1951). Additionally, the preamble may be limiting where “a particular disputed preamble phrase” provides the antecedent basis for claim elements. *Catalina*, 289 F.3d at 808. “Likewise, when the preamble is essential to understand limitations or terms in the claim body, the preamble limits claim scope.” *Id.* Finally, the preamble is limiting when it is relied upon “during prosecution to distinguish the claimed invention from the prior art.” *Id.* “Without such reliance . . . a preamble generally is not limiting when the claim body describes a structurally complete invention.” *Id.* at 809.

Sensus argues these preamble phrases direct the claims to an IVDS system. SENSUS VERIZON BR. at 2. Sensus further argues the preamble itself is limiting because it breathes life and meaning into the claims and provides antecedent bases and structural limitations. *Id.* at 3-4. Sensus concludes preambles limit the claims to an IVDS system. *Id.* at 4. Bell, through its incorporated briefing, argues similarly. Plaintiff contends the preambles merely state intended uses and are not limiting. PL.’S VERIZON RESP. at 2. Plaintiff argues the specification’s disclosure of non-video alternate embodiments further supports this conclusion. *Id.* at 3.

The specific preamble phrases in dispute are not limiting because they recite a statement of use and do not provide antecedent basis for any element nor do they introduce necessary structure into the claim.

In Claim 1 of the ‘101 Patent, which is exemplary for the purposes of resolving this dispute, the allegedly limiting phrase is “interactive video network.” The claim recites:

A base station configuration in a two-way communication interactive video network having a network hub switching center for routing communications from and to a plurality of subscriber units at various geographic locations served by a base station that processes digital data modulated on an r-f carrier and transmitted from a plurality of subscriber units dispersed over a predetermined base station geographic area by presenting multiplexed digital data synchronously related to the base station broadcast signal for communication from identified individual subscriber units within designated geographic services areas

‘101 Patent at 11:20-31. Said another way: Claim 1 claims “[a] base station configuration in a two-way communication interactive video network.” *Id.* at 11:20-21. The network has “a network hub switching center” and “a plurality of subscriber units.” *Id.* at 11:21-23. The subscriber units belonging to the network are “dispersed over a predetermined base station geographic area,” *id.* at 11:26-27, and located “at various geographic locations served by a base station.” *Id.* at 11:23-24. The base station “processes digital data.” *Id.* at 11:24-25. This digital data has been “modulated on an r-f carrier and transmitted from a plurality of subscriber units.” *Id.* at 11:25-26. The network hub switching center “rout[es] communications from and to” the subscriber units “by presenting multiplexed digital data . . . for communication from identified individual subscriber units.” *Id.* at 11:22-30. Thus, the preamble describes the network in which the claimed base station configuration is intended to be used. *See Catalina*, 289 F.3d at 809 (observing “preambles describing the use of an invention generally do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure”).

Additionally, the interactive video network phrase does not serve as the antecedent basis for an element in the claim body. The claim encompasses a base station configuration comprising “base station data processing and transmission facilities,” ‘101 Patent at 11:33, “base station reception

means,” *id.* at 11:40, and “a set of local subscriber transceiver units.” *Id.* at 11:49. The base station transmits and receives digital data messages to and from local subscriber units. *Id.* at 11:33-39. Although the preamble describes these components as being part of the intended network for this base station configuration, the claim body independently sets forth a structurally complete invention. *See Catalina*, 289 F.3d at 808; *see also Schumer v. Lab. Computer Sys.*, 308 F.3d 1304, 1310 (Fed. Cir. 2002) (finding preamble not limiting “where the language of the preamble is superfluous”). Furthermore, the preamble does not provide an antecedent basis for nearly all of the claim elements. The only element that seemingly does rely on the claim preamble, “said base station geographic area,” ‘101 Patent at 11:43-44, is unrelated to the specific preamble phrase at issue – *i.e.*, the interactive video phrase. *See Bristol-Myers Squibb Co. v. Ben Venue Labs.*, 246 F.3d 1368, 1374-75 (Fed. Cir. 2001) (considering the limiting effect of preamble phrases independently). Finally, Defendants do not suggest the applicant relied on the preamble phrase during prosecution to distinguish prior art.

Further, “interactive video” does not restrict the base station configuration to use in a particular type of network. As discussed in more detail, *infra*, the claimed invention was directed towards utilizing the FCC’s 218-219 MHz band, which was referred to as “Interactive Video and Data Services.” Apparently, however, the FCC did not intend to limit the use of this band to interactive television. *See* 47 C.F.R. § 95.801 (1992). Like the inventor, which noted the use of low power subscriber units for applications such as meter reading and soft drink inventory monitoring, the FCC recognized the possibility of other applications for low power subscriber units. FCC REPORT AND ORDER, May 16, 1996, WT Docket No. 95-47 at ¶ 12. Although the FCC would eventually rename the service to reflect the breadth of possible applications, the patents-in-suit were

prosecuted while the service was still inaptly named. FCC 99-228, ORDER, MEMORANDUM OPINION AND ORDER AND NOTICE OF PROPOSED RULEMAKING, released Sept. 18, 1998. Nonetheless, the patents-in-suit were not directed to “interactive video,” or “interactive television.” Nothing in the body of the claim would restrict the claimed structure to a “video” system, and the preamble phrase does not provide any essential structure to the complete invention described in the claim body. Additionally, it is noted that the patent discusses uses for the invention that do not involve “video” systems. *See, e.g.*, ‘101 Patent at [57] (noting “monitoring of inventory, temperature, and other parameters for passive automatic alarm systems and the like, as well as active mobility of subscriber units for meter reading and the like is made possible with direct low-cost nationwide real time reporting capability”); *id.* at 6:5-8 (stating “this invention encourages such additional interactive services in the network as typified by meter reading, and inventory control in soft drink dispensing machines, etc.”). Furthermore, to the extent the preamble phrase provides context for the invention, it merely explains that the base station configuration was designed for use with an “interactive video” network, as it was understood by one of skill in the art of that day; that is, as a network operating on the 218-219 MHz band. This does not restrict the network to a television or “video” network. Moreover, this would still not change the preamble phrase into a limitation because such context still serves only to state an intended use. *Catalina*, 289 F.3d at 809.

In its supplemental briefing, Sensus argues the preamble is limiting because Plaintiff purportedly relied on it during reexamination of the patents-in-suit to distinguish prior art. SENSUS REEXAM BR. at 2-4, 5-11. Sensus also argues it is limiting because Plaintiff purportedly relied on it as a limitation during claim construction. *Id.* at 4-5. Plaintiff states it did not rely on the preamble

to describe the scope of the claims and argues Sensus mischaracterizes its statements to the PTO. PL.'S REEXAM RESP. at 6-11.

Plaintiff did not rely on the preamble phrase as a limitation during the reexamination proceedings or the claim construction process in this or the *Verizon* case. In rebutting obviousness challenges, Plaintiff explained the Morales-Garza and Cunningham references were incompatible and would be inoperable in combination. *See* DEF.'S REEXAM BR. EX. P at 5-7, 25. Plaintiff further rebutted the alleged regulatory motivation to adapt the Morales-Garza reference to the FCC's IVDS system by noting its reliance on television signals would be incompatible with the FCC directive's allocation of bandwidth. *Id.* at 8. Plaintiff did distinguish the Morales-Garza reference on the basis of transmission on a carrier frequency of substantially 218 MHz, but it was in the context of a dependent claim that was specifically limited to that frequency. *Id.* at 17. None of the reexamination arguments that Defendant identified constitute clear, unambiguous disclaimers of claim scope. *See Omega Eng'g Inc.*, 334 F.3d at 1323-26. Likewise, Plaintiff's claim construction argument did not rely on the preamble phrase to distinguish the entire invention from any of the defendants' proposed constructions. In one instance, a proposed construction would have limited the claim scope to television broadcast signals, which would have been incompatible with particular embodiments of the invention, such as the embodiment in the dependent claims restricting transmission to substantially the 218 MHz band. In the other instance, the proposed construction would have strictly limited claims scope to the FCC's IVDS definition, improperly limiting all the claims to a particular embodiment. In neither case did Plaintiff rely on the interactive video preamble to distinguish all aspects of the invention from the proposed constructions.

The “interactive video” preamble phrases do not set forth essential structure of the invention, do not provide relevant antecedent bases, are unnecessary for understanding the limitations of the claim, and were not relied upon during prosecution. Relying on these “guideposts,” *Catalina*, 289 F.3d at 808, the Court finds these preamble terms are not limiting and do not require further construction.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
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| <p>base station data processing and transmission facilities <i>‘101 Patent, Claims 1-15</i></p> | <p>No construction Necessary.</p> | <p>If this term is subject to 35 U.S.C. § 112 ¶6, the construction should be the same as “base station data processing transmission means”:</p> <p>Function: Transmitting to a set of local subscriber units and receiving from a subset of those local subscriber units multiplexed digital data messages of variable lengths for point-to-point communication between individual subscribers with remotely located reception means.</p> <p>Structure: Cell base station [local area base station cell] 3 (Figs. 1, 2, 6A, and 7A) utilizing the communication</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶6</p> <p>Function: Transmitting to a set of local subscriber units and receiving from a subset of those local subscriber units multiplexed digital data messages of variable lengths for point-to-point communication between individual subscribers with remotely located reception means.</p> <p>Structure: Cell base station [local area base station repeater cell] 3 (Figs. 1, 2, 6A, 7A), and communication protocols to the extent disclosed in Figs. 3, 4, 6B, 7B,</p> |

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| | | protocols to the extent disclosed in Figs 3, 4, 6B, 7B, 8A, 8B. | 8A, 8B |
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The parties again incorporate by reference previous briefing on this term. Although Sensus proposes a construction in the joint claim construction chart “[i]f the term is subject to 35 U.S.C. § 112 ¶ 6,” it does not specifically brief the term in any of its papers. Bell incorporates the defendant briefing from the *Verizon* case and Plaintiff incorporates its previous submissions on the term. In that briefing, Plaintiff argues the presumption that this is not a means-plus-function limitation is not overcome. The *Verizon* case defendant argued “facilities” is a nonce word and neither the phrase itself nor the rest of the claim language connotes structure to a person of ordinary skill in the art.

This term is not governed by 35 U.S.C. § 112, ¶ 6. The paragraph presumptively does not apply because “base station data processing and transmission facilities” does not use “means.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002). Defendant “can rebut this presumption by demonstrating the claim term fails to recite sufficiently definite structure or else recites a function without reciting sufficient structure for performing that function.” *Id.* (internal quotation omitted). Generic terms “typically do not connote sufficiently definite structure.” *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006). However, “[c]laim language that further defines a generic term like ‘mechanism’ can sometimes add sufficient structure to avoid 112 ¶ 6.” *Id.* Plaintiff provides contemporaneous technical dictionaries defining “facilities, transmission” as a “[g]eneral term for equipment which acts as a bearer of information signals: . . . narrow and broadband radiocommunication systems.” PL.’S REPLY at EX. D. Additional structural is connoted by the adjacent claim language “base station data processing and transmission.” The

McGraw-Hill Dictionary of Scientific and Technical Terms defines “base station,” in the field of communications, as “[a] land station, in the land mobile service, carrying on a service with land mobile stations (a base station may secondarily communicate with other base stations incident to communications with land mobile stations)” and as “[a] station in a land mobile system which remains in a fixed location and communicates with the mobile stations.” MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 197 (5th ed. 1994). This definition is consistent with the applicant’s use of the term throughout the specification. *See, e.g.*, ‘101 Patent at 3:32-4:6 (describing the base station as transmitting and receiving messages to and from subscriber units). Thus, one of ordinary skill in the art would have understood “base station data processing and transmission facilities” to connote structure adequate to “transmit[] . . . and receiv[e] . . . digital data messages.” Therefore, the Court finds this term is not governed by 35 U.S.C. § 112, ¶ 6.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
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| <p>base station data processing and transmission means <i>‘546 Patent, Claim 1</i></p> <p>data processing and transmission means <i>‘546 Patent, Claims 2-13</i></p> | No Construction Necessary | <p>Should be construed according to 35 U.S.C. § 112 ¶ 6.</p> <p><u>Function (base station data processing and transmission means):</u> Transmitting to a set of local subscriber units contained within said local base station geographic area associated with said local base station repeater cell means and receiving from a</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> transmitting to a set of said local subscriber units contained within said local base station geographic area associated with said local base station repeater cell means and receiving from a subset of said local</p> |

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| | | <p>subset of said local set of subscriber units multiplexed synchronously related digital data messages of variable lengths for point-to-point communication between said local base station repeater cell means and said subset of said local subscriber units.</p> <p><u>Function (data processing and transmission means):</u> Transmitting to and receiving from at least one of said plurality of said subscriber units multiplexed synchronously related data messages of variable lengths, such that point-to-point communication between said base station repeater cell means and said at least one of said plurality of subscriber units is possible.</p> <p><u>Structure (both terms):</u> Cell base station [local area base station repeater cell] 3 (Figs. 1, 2, 6A and 7A) utilizing the communication</p> | <p>set of subscriber units multiplexed synchronously related digital data messages of variable lengths.</p> <p><u>Structure:</u> Cell base station [local area base station repeater cell] 3 (Figs. 1, 2, 6A, 7A) and communication protocols to the extent disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B.</p> |
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| | | protocols to the extent disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B. | |
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Plaintiff and Bell incorporate by reference earlier briefing from the *Verizon* case. Sensus largely joins with the *Verizon* case defendant’s proposal, but omits “processor 486” as part of the corresponding structure if the terms are governed by U.S.C. § 112, ¶ 6. SENSUS VERIZON BR. at 7-8. In the *Verizon* briefing, the defendant advocated a means-plus-function construction and Plaintiff argued the claim language proves adequate structure to overcome this presumption.

Unlike the base station facilities term, these terms “invoke a rebuttable presumption that § 112 ¶ 6 applies” because they use “means.” *CSS Fitness*, 288 F.3d at 1369. The presumption is overcome if “ the claim recites sufficient structure for performing the described functions in their entirety.” *TriMed, Inc. v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008). As discussed, *supra*, “base station” possessed a well defined meaning in the art connoting structure for transmitting and receiving digital data messages, the function in both independent claims of the ‘546 Patent. The disputed terms must be read in the context of the entire patent. *Phillips*, 415 F.3d at 1314. In both independent claims the “base station data processing and transmission means,” ‘546 Patent at 10:65, and the “data processing and transmission means” are components further comprising a “base station repeater cell.” *See, e.g.*, ‘546 Patent at 11:35-36. A repeater is “[a]n amplifier or other device that receives weak signals and delivers corresponding strong signals with or without reshaping of waveforms,” MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1688 (5th ed. 1994), and a “repeater station,” *i.e.*, “repeater cell,” is simply “[a] station containing one or more repeaters.” MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1688 (5th ed. 1994).

The specification uses these terms in accordance with their ordinary meaning – that is, it describes a base station repeater as relaying a data message to another cell for delivery. *See* ‘101 Patent at 4:16-21 (describing the base station relaying received messages to a switching hub for ultimate delivery to individual subscribers in remote base stations). Reception, data processing and transmission components are standard, essential elements of a repeater cell, as one of ordinary skill would understand the term. Thus, read in context, the terms connote structure adequate to perform the transmission and receiving function.

Therefore, the Court finds these terms are not governed by 35 U.S.C. § 112, ¶ 6.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|--|--|---|---|
| portable <i>‘101 Patent, Claims 17, 19, 20</i> <i>‘546 Patent, Claim 14</i> | No Construction Necessary | Readily movable while operable to communicate | Readily movable while operable to communicate |
| mobile <i>‘101 Patent, Claims 1-15</i> <i>‘546 Patent, Claims 1, 5</i> | No Construction Necessary | Readily movable while operable to communicate | Readily movable while operable to communicate |
| stationary <i>‘101 Patent, Claims 16-18</i> | No Construction Necessary | Not mobile or portable | |

The issue of portability has been extensively briefed. Plaintiff and Sensus briefed the terms “portable” and “mobile” in their supplemental *Verizon* case briefing.² *See* SENSUS VERIZON BR. at 1-2; PL.’S VERIZON RESP. at 1-2. Additionally, Plaintiff and Sensus provided additional

² “Mobile” was not at issue in the *Verizon* case, but Sensus urged its consideration at that time.

supplemental briefing on “portable.” *See* SENSUS PORTABLE BR.; PL.’S PORTABLE RESP. In their primary claim construction briefs, Plaintiff and Sensus largely rest on their previous argument but introduce additional argument regarding “stationary.” *See* PL.’S BR. at 4-5; SENSUS RESP. at 5-6. Bell incorporates by reference argument for “portable” and further advocates an identical construction for “mobile.” *See* BELL RESP. at 4-6. Bell did not address “stationary.” Finally, Plaintiff and Sensus discussed “portable” and “mobile” in the context of the reexamination. *See* SENSUS REEXAM BR. at 12-13; PL.’S REEXAM RESP. at 13.

The parties’ disagreement can fairly be summarized as three-pronged. First, Defendants contend the specification requires “portable” and “mobile” devices to be operable while moved. *See* SENSUS VERIZON BR. at 1-2; BELL RESP. at 4-6. Second, Sensus argues its construction is necessary in light of Plaintiff’s infringement contentions. SENSUS PORTABLE BR. Finally, Sensus argues that Plaintiff, while distinguishing prior art, confirmed portability requires mobile operation. SENSUS REEXAM BR. at 12-13.

As an initial matter, the Court declines to construe “stationary.” Nothing in the specification indicates the term possesses anything other than its ordinary meaning. Sensus’s attempt to use the term to draw a distinction between it and “mobile” or “portable” is flawed. Mobile and portable are used in the claim language to describe subscriber units, whereas stationary is used to describe receive only terminals. Thus, even if “stationary” had a special meaning when describing receiver only terminals, the relevancy of that meaning is not readily apparent to the meaning of “mobile” or “portable” when describing subscriber units. Moreover, the term “stationary” does not bear on whether a given device may or may not be operable when moving. Claims 16-18 of the ‘101 Patent require only that the receive only terminals of the claimed system are stationary within that system.

Nothing compels the conclusion that the receive only terminals may not be operable while moving nor that they may not be readily movable when not utilized in that specific system. In sum, the construction of this term is irrelevant to the parties' genuine dispute over "mobile" and "portable." Construing this term, when it is used in its plain and ordinary sense, is unnecessary and would only serve to distract or confuse a jury.

The specification does not use "portable" or "mobile" in a manner that requires a device to be "readily movable while operable to communicate." In some instances, the term is used to describe a device capable of operating while moving. For example, in the Background Art section, the specification refers to "portable telephone communication systems." '101 Patent at 1:68-2:1. However, the specification also uses the term where a device capable of operating while moving is not necessarily implied. *See, e.g., id.* at 6:27-30 (describing "[s]mall and portable home units are also possible. There is considerable advantage of longer battery life for portable units.") And in other instances, the disclosed embodiment is one which does not suggest operation while moving. *See, e.g., id.* at 1:40-43 (describing "battery powered, portable subscriber units, suitable for such functions as meter reading"); *id.* at 6:5-8 (describing use of subscriber units for "meter reading, and inventory control in soft drink dispensing machines, etc."). Thus, nothing in the specification suggests that the terms were used in a way inconsistent with their plain and ordinary meanings – *i.e.*, "capable of being carried or moved about," MERRIAN-WEBSTER'S COLLEGIATE DICTIONARY 907 (10th ed. 1999), or "capable of being easily and conveniently transported." MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1550 (5th ed. 1994); *see also CSS Fitness*, 288 F.3d at 1366 (stating there is "a heavy presumption that a claim term carries its ordinary and customary meaning" (quotation omitted)). In some embodiments, these portable or mobile units may

be operable while moving, but in other embodiments they are not. Thus, it would be improper to read such a limitation into the claims. *Vitronics Corp.*, 90 F.3d at 1583. Although Plaintiff maintains the terms are not synonymous, *see* PL.’S VERIZON BR. at 1; PL.’S REPLY at 1 n.1, it has not explained how the terms are meaningfully different.

The Court declines to construe the terms in light of the Sensus’s accused products. In its supplemental briefing, Sensus cites Plaintiff’s infringement contentions, which accuse certain metering devices that must be affixed to gas and water lines. SENSUS PORTABLE BR. at 1. Sensus argues that failing to explicitly require mobile operation subjects its “fixed” and “stationary” devices to infringement allegations. *Id.* at 1-3. In response, Plaintiff notes Sensus’s claim construction position is inconsistent with its own trade use of the term “portable.” PL.’S PORTABLE RESP. at 3-5 (observing Sensus markets products that must be affixed to water lines as ‘portable’). Sensus’s claim construction argument is essentially a request for the Court to pass judgment on the merits of its non-infringement position. This is improper at this stage. The question is what these terms mean as used in the patents-in-suit, not whether Sensus’s accused products are “portable” or “mobile.” “A claim is construed in the light of the claim language, the other claims, the prior art, the prosecution history, and the specification, *not* in light of the accused device.” *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (en banc) (emphasis original).

Finally, nothing in the cited portion of the reexamination file compels the Court to construe “mobile” and “portable” as Sensus wishes. Plaintiff distinguished claim 19 from the prior art, noting that the Martinez reference did not teach “facilities for communicating from the subscriber units when moved through different geographic zones.” *See* SENSUS REEXAM BR. EX. P at 23-24. Plaintiff also noted the Martinez reference “does not teach or suggest movement through geographic

zones,” but this was in the context of a discussion focused on the claimed facilities and offered as support for the conclusion the Martinez reference “accordingly, does not teach or suggest any such facilities” *Id.* at 24. Therefore, Sensus’s reexamination briefing does not affect the Court’s conclusions.

Having resolved the parties’ claim scope dispute, the Court finds the terms do not require construction because their meanings are clear in the context of the claims and will be readily understandable to the jury. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008); *Fenner Inv. Ltd. v. Microsoft Corp.*, No. 6:07-cv-8, 2008 WL 3981838, at *3 (E.D. Tex. Aug. 22, 2008) (finding a court need not construe a disputed term so long as it has resolved the claim scope dispute between the parties). Although the Court does not construe these terms, the parties may not interpret them in a manner inconsistent with this opinion.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|---|--|---|---|
| <p>base station reception means <i>‘101 Patent, Claims 1-15</i></p> | <p>Subject to § 112 ¶ 6;</p> <p><u>Function:</u> receiving and processing data messages from the set of local subscriber units at that base station;</p> <p><u>Structure:</u> “remote receivers 20A-20N or 22-22’, each connected by a link 21 to a local area base station repeater cell [cell base station] 3 (Figs. 1-2, 6A and 7A), and equivalents;</p> | <p>Should be construed according to 35 U.S.C. § 112 ¶ 6</p> <p><u>Function:</u> Receiving and processing data messages from the set of local subscriber units at that base station</p> <p><u>Structure:</u> Indefinite.</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> Receiving and processing data messages from the set of local subscriber units at that base station.</p> <p><u>Structure:</u> Remote receivers 20AN or 22-22’, each connected by a link 21 to a local area base station repeater cell [cell base station]</p> |

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| | | | 3 (Figs. 1-2, 6A and 7A), including the communication protocol to the extent disclosed in Figs. 3, 4 6B, 7B, 8A, 8B. |
| reception means <i>'546 Patent, Claims 2-13</i> | <p>No construction necessary with respect to claim 1 of the '546 Patent.</p> <p>In 546:2–13, subject to § 112 ¶ 6;</p> <p><u>Function</u>: receiving and processing said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units and relaying said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units to said base station repeater cell means;</p> <p><u>Structure</u>: “local area repeater station, local base station repeater cell, cell base station, cell (item 3 in FIG. 1, 2, 6A, 7A); relay station(s) 20A-20N (FIG. 2); 22-22’(FIG.6A, 7A); remote receiver(s)</p> | <p>Should be construed according to 35 U.S.C. § 112 ¶ 6.</p> <p><u>Function [546:1]</u>: Receiving and processing data messages from said set of local subscriber units.</p> <p><u>Function [546:2]</u>: Receiving and processing said multiplexed synchronously related data messages from said at least one of said subscriber units and relaying said multiplexed synchronously related data messages from at least one of said plurality of subscriber units to said base station repeater cell means.</p> <p><u>Structure (both claims)</u>: Indefinite.</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function</u>: Receiving and processing said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units and relaying said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units to said base station repeater cell means.</p> <p><u>Structure</u>: Remote receivers 20A-N or 22-22’, each connected by a link 21 to a local area base station repeater cell [cell base station repeater cell [cell base station] 3 (Figs. 1-2, 6A and 7A), including the communication protocol to the extent</p> |

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| | 20-20A (FIG. 1); cell site transmission system 40 (FIG. 2); switch control center 14 (FIG. 1); terminal directory 13 (FIG. 1); and as described in the specification of the '546 Patent at 7:38-43, 3:58-63, 4:63-5:5, and 5:18-54, and equivalents; | | disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B. |
|--|--|--|--|

Plaintiff and Bell largely rest on the *Verizon* case briefing. Sensus agrees with the *Verizon* case defendant’s proposal with respect to the receiving and relaying portions of the function. SENSUS VERIZON BR. at 8-9. Sensus argues the limitation is ultimately indefinite for failing to disclose structure for processing data messages. *Id.* Thus, apart from Sensus’s indefiniteness allegation, the parties’ positions do not differ substantially from those argued in the *Verizon* case. There, the defendant argued Plaintiff’s proposals ignore that processing and receiving is performed at the base station and not elsewhere. Defendant additionally argued Plaintiff’s corresponding structure included extraneous elements that were unnecessary to performing the claimed function. Plaintiff argued Figures 1 and 2, and their accompanying text, completely describe the corresponding function and the defendant’s proposals improperly import unnecessary elements from other figures.

These terms are subject to § 112, ¶ 6. As noted in the discussion of “processing and transmission means” terms, “base station” connotes structure to one of ordinary skill in the art. However, the claimed reception means are unlike reception means one of ordinary skill in the art would generally associate with a “base station.” As noted in the Background Art section, “[t]here has been no known interactive video data service system available heretofore that has the capability

of servicing an assigned base station area with subscriber units transmitting in a milliwatt power range.” ‘101 Patent 1:36-39. An objective of the invention was to provide “two-way interactive communications with simplified low-cost subscriber units transmitting in milliwatt peak power ranges under parameters compatible with FCC licensing restrictions.” *Id.* at 3:19-21. Thus, the invention comprised not only “a central transmitter and data processing site” but also “[a] plurality of receive only stations distributed throughout the region and connected . . . to the central data processing site.” *Id.* at 3:62-68. The ordinary meaning of “base station” implied a single fixed communication and processing site, with which the “processing and transmission means” terms conformed, but would not include dispersed receivers as claimed by the “reception means” terms. Thus, although “base station” connotes some structure, it does not connote structure adequately supporting the claimed function here. Therefore, the terms as used in claims 1-15 of the ‘101 Patent and claim 2-13 of the ‘546 Patent are governed by 35 U.S.C. § 112, ¶ 6.

The *Verizon* defendant correctly identified the functions of the terms in the ‘101 and ‘546 Patents. The parties disagreed as to the corresponding structure. Figures 1 and 2 depict “a set of subscribers at response units 4 communicat[ing] . . . to either a set of local remote receivers 20, each connected by a link 21 . . . to repeater cell 3, or to a local area base station repeater cell 3.” ‘101 Patent at 5:2-7. Local remote receivers 20A through 20N are likewise arranged. *Id.* at 5:54-62. The specification alternatively refers to the remote receivers as items 22 through 22' in Figures 6A and 7A, which describes the base station as a cell base station and cell, respectively. The set of local remote receivers 20 through 20N (Figs. 1, 2), 22 through 22' (Figs. 6A, 7A), and repeater cell, local area base station repeater cell, cell base station, cell 3 (collectively, “base station”) (Figs. 1, 2, 6A, 7A) perform the function of receiving and processing data messages from the local subscriber units.

Local remote receivers 20 through 20N (Figs. 1, 2), 22 through 22' (Figs. 6A, 7A), base station 3 (Figs. 1, 2, 6A, 7A), and link 21 (Figs. 2, 6A) perform the function of relaying the data messages to the base station repeater cell means. In its proposal, the *Verizon* defendant included link 21 and the communication protocols disclosed in Figures 3, 4, 6B, 7B, 8A, and 8B. Link 21 connects the remote receiver to the base station repeater cell, and is essential for relaying messages, but unnecessary for performing the receiving and processing function. Finally, the communication protocols are unrelated to either receiving messages from the subscriber units or to relaying the messages to the repeater cell. Plaintiff also identified additional structures from Figure 1, which it describes are “additional structure for carrying out the functions associated with ‘reception means.’” These structures are dissociated from either the remote receivers or the base station. The functions here relate only to receiving data messages at a remote receiver and relaying that message to the base station. The various control and billing centers Plaintiff identified, elements 2, 13, 14, 15, and 16 in Figure 1, are not part of that function, nor is cell site transmission system 40, which transmits to other base stations. Those elements may only be of relevance after a base station has already received a relayed message. Thus, the additional structure Plaintiff cited is unnecessary for performing those specific functions.

Finally, Sensus argues the limitation includes a processing function without any corresponding structure. As explained in the Court’s Report and Recommendation, the processing function is performed by the remote receiver. Therefore, adequate structure is recited to perform that function.

Accordingly, the function of the term in the ‘101 Patent is “receiving and processing data messages from the set of local subscriber units at that base station.” ‘101 Patent at 11:40-42. The

corresponding structure is “remote receivers 20-20N (Figs. 1, 2), 22-22' (Figs. 6A, 7A), and repeater cell, local are base station repeater cell, cell base station, cell 3 (Figs. 1, 2, 6A, 7A), and statutory equivalents.” The functions of the term in the ‘546 Patent are “receiving and processing said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units and relaying said multiplexed synchronously related data messages from said at least one of said plurality of subscriber units to said base station repeater cell means.” ‘546 Patent at 11:44-49. The corresponding structure is “remote receivers 20-20N (Figs. 1, 2), 22-22' (Figs. 6A, 7A), and repeater cell, local are base station repeater cell, cell base station, cell 3 (Figs. 1, 2, 6A, 7A), link 21 (Figs. 2, 6A), and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|--|---|---|---|
| base station broadcast signal <i>‘101 Patent, Claims 1-15</i> <i>‘546 Patent, Claim 1</i> | a wireless signal transmitted to a plurality of subscriber units and/or receivers | A wireless television signal transmitted from a base station to all subscriber units in the base station’s geographic area. Alternatively, “a wireless video signal transmitted by a base station to a plurality of subscribers and/or receivers.” | A wireless video signal transmitted from a base station to disseminate identical information to a plurality of subscriber units |

Plaintiff and Sensus address this term in their supplemental *Verizon* case briefing. Bell and Plaintiff also incorporate the other relevant briefing filed by the parties in that case. Sensus’s proposal differs from the *Verizon* defendant’s in that it requires the wireless signal be a television

signal, rather than video signal. SENSUS VERIZON BR. at 3. Additionally, Sensus's proposal requires the signal be transmitted to all subscriber units in the range of the base station. *Id.*

The patents-in-suit are not restricted video (or television) applications. Throughout the specification, the applicant referenced video or television broadcast. *See, e.g.*, '101 Patent at 3:51-52 (describing synchronization with "television frames of a master TV channel"); *id.* at 5:46-47 (referring to the FCC's "interactive video data service"). Despite these references, it is clear the patents-in-suit are broader than video or television transmission. *See, e.g.*, '101 Patent at 6:5-13 (disclosing use of invention for "meter reading, and inventory control in soft drink dispensing machines" and noting in such applications "subscriber units 4 may be provided without the necessity for video displays"). The video references stem from FCC's original name for short distance transmission on the 218-219 MHz band. *See id.* at 3:6-16 (explaining "[i]t is an objective of this invention to improve the state of the art by effectively using licensed interactive communication channels" and describing requirements of "the FCC licensing conditions for interactive video data service"); *id.* at 4:2-6 (stating "the base station serves a gridwork of receiver sub-cell sites distributed at locations permitting reliable response by subscribers transmitting with milliwatt digital signal levels in the FCC authorized 218-219 MHz band"). However, the FCC did not limit the Interactive Video and Data Service ("IVDS") to television or video broadcast, acknowledging its utility as "a short distance communications service." 47 C.F.R. § 95.801 (1992). Indeed, "the 218-219 MHz band is insufficient for the transmission of conventional full-motion video," FCC 218-219 MHz RADIO SERVICE, available at http://wireless.fcc.gov/services/index.htm?job=service_home&id=218_219, and the FCC rejected a request to limit IVDS to video applications, noting it was adaptable to "providing video, voice, or data" and that it "envision[ed] a variety of uses for

IVDS.” FCC REPORT AND ORDER, May 16, 1996, WT Docket No. 95-47 at ¶ 12. In 1998, the FCC “[r]edesignate[d] this service as the ‘218-219 MHz Service’ to reflect the breadth of services evolving in this spectrum.” FCC 99-228, ORDER, MEMORANDUM OPINION AND ORDER AND NOTICE OF PROPOSED RULEMAKING, released Sept. 17, 1998. Thus, although the specification frequently refers to video, the claimed invention is not so limited.

Furthermore, the specification and the prosecution history distinguish between a “broadcast signal” and a “television signal.” The specification describes a broadcast signal as including signals other than a video or television signal. ‘101 Patent at 6:63-68 (describing a ringing signal for activating a unit); *id.* at 7:3-5 (describing a control signal). Likewise, restricting a broadcast signal to a video or television signal would exclude preferred embodiments. *See, e.g., id.* at 1:40-43 (describing “battery powered, portable subscriber units, suitable for such functions as meter reading”); *id.* at 6:5-8 (describing use of subscriber units for “meter reading, and inventory control in soft drink dispensing machines, etc.”). The applicant similarly distinguished the claimed invention from a system restricted to television signals, stating in response to an office action “the Martinez reference specifically disclose[s] transmitting data messages which are integral with a conventional television signal. Such is not the case in the present invention.” OFFICE ACTION RESPONSE, Dec. 12, 1994, at 4. Finally, dependent claim 11 specifically limits the broadcast signal to a television signal, indicating a broadcast signal is broader. *See Nazomi Commc’n, Inc. v. Arm Holdings, PLC*, 403 F.3d 1364, 1370 (Fed Cir. 2005) (observing “[t]he concept of claim differentiation normally means that limitations stated in dependent claims are not to be read into the independent claim from which they depend” (quotation omitted)).

Finally, a broadcast signal may be intended for a specific subscriber unit, but it must be broadcast to all units. This is inherent in the term, as the claim language specifically describes the signal as a broadcast signal, as opposed to a multicast or unicast signal. Any given message transmitted by the base station to a subscriber unit is sent to all units. This does not foreclose sending a given message for a specific subscriber unit or units, *see* ‘101 Patent at 7:34-37 (describing addressing messages to specific units), but even a message intended for a specific unit is transmitted to all subscriber units within the base station geographic area.

Therefore, the Court construes this term as “a wireless signal transmitted to a plurality of subscriber units and/or receivers.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Propsoed | Bell’s Proposed Construction |
|---|---|--|---|
| <p>synchronously related ‘101 Patent, Claims 1-15 ‘546 Patent, Claims 1-14</p> | <p>Related in time and/or frequency (which is the Plain and Ordinary Meaning)</p> | <p>A wireless television signal transmitted from a base station to all subscriber units in the base station’s geographic area.</p> <p>Alternatively, “a wireless video signal transmitted by a base station to a plurality of subscribers and/or receivers.”</p> | <p>Transmitted during response or blanking intervals of [base station broadcast signal] Indefinite in claims 546:2-13</p> |

Plaintiff and Bell again incorporate the *Verizon* case briefing. Sensus argues the data messages are synchronized in time and frequency by the base station broadcast signal “in order to avoid interference.” SENSUS VERIZON BR. at 6-7. Plaintiff disagrees with this construction, arguing it introduces two unnecessary limitations: 1) that the synchronization achieves a particular result; and

2) that the synchronization must be caused by the base station broadcast signal. PL.’S VERIZON RESP. at 4. Additionally, in its briefing on the reexamination proceedings, Sensus argues Plaintiff distinguished prior art on the basis that it only taught frequency synchronization. SENSUS REEXAM BR. at 13. Plaintiff argues it distinguished the prior art based on what was synchronously related, rather than how it was synchronously related. PL.’S REEXAM REESP. at 19. Plaintiff further argues its reexamination position did not affect the scope of all claims because the specific claim being distinguished expressly requires timing synchronization. *Id.* at 20.

With respect to the *Verizon* defendant’s argument, incorporated as Bell’s position, the claimed invention is not restricted to the protocol disclosed in the Morales patent. To the extent the parties’ arguments in the *Verizon* case turned on whether the broadcast signal is a television signal, the Court has resolved the issue for the reasons explained when discussing the “interactive video” and “broadcast signal” terms. The specification uses the “synchronous” and related words to discuss not only synchronization with a television signal, ‘101 Patent 3:50-52, but also speaks of “communications and switching connections [that] are synchronized throughout a nationwide network.” *Id.* at 3:52-54. This suggests synchronization is not necessarily limited to blanking intervals. Although the specification refers to the Morales patent during its discussion of synchronization, *see id.* at 7:43-53 (citing the Morales patent), the discussion primarily served to distinguish the invention “from any former telephone switching system art which is asynchronously switched.” *Id.* at 7:53-55. In sum, while Defendant’s proposal encompasses one of the disclosed embodiments, it is unnecessarily limiting.

Turning to Sensus’s argument, the Court rejects the proposed additional limitations. First, although a benefit of synchronization may be avoiding interference, Sensus provides no intrinsic

evidence that this is the necessary result of synchronization as the term is used in the patents-in-suit. Second, although the patents-in-suit disclose synchronization to the base station signal in some embodiments, not all embodiments are so limited. Indeed, some claims specifically require such synchronization, *see* ‘546 Patent at claim 1, while other claims do not. *See id.* at claim 2. Finally, Plaintiff’s comments during reexamination regarding the Martinez reference’s teaching of synchronously related frequencies does not limit the present invention to synchronization in both time and frequency. Plaintiff distinguished the Martinez reference based on what was synchronized, but not on how it was synchronized.

Therefore, the Court construes this term as “related in time and/or frequency.”

| Term | Plaintiff’s Proposed Construction | Sensus’ Proposed Construction | Bell’s Proposed Construction |
|---|--|---|--|
| <p>means for providing for two-way digital communications between two different subscriber units <i>‘101 Patent, Claims 16-18</i></p> | <p>No Construction Necessary</p> | <p>Should be construed according to 35 U.S.C. § 112 ¶ 6.</p> <p><u>Function [101:16]:</u> Providing for two-way digital communications between two different subscriber units by a serial communication path extending through a base station, the satellite, the central station, the satellite, and back to a base station, wherein at least some of said base stations serve a set of subscriber units dispersed over a</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6</p> <p>Function: providing for two-way digital communications between two different subscriber units</p> <p>Structure: a serial communication path from subscriber units 4, 4’, 4’’, or 4’’’ (Figs. 1, 2, 6A, 7A, 9A) connected to remote receivers 20A-N or 22-22’, each connected by a link 21 to a local area</p> |

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| | | <p>predetermined geographic area and comprise communication means ..., subscriber transmitter units ..., and data processing means</p> <p><u>Function [101:17]:</u> Providing for two-way digital communications between two different subscriber units by a serial communication path extending through a base station, the satellite, the central station, the satellite, and back to a base station, wherein at least some of said base stations serve a set of subscriber units dispersed over a predetermined geographic area and comprise communication means ..., subscriber transmitter units ..., data processing means ... [and] means to receive</p> <p><u>Function [101:18]:</u> Providing for two-way digital communications between two different subscriber units by a</p> | <p>base station repeater cell [cell base station] 3, which is connected to satellite 1 to audience control and data center 2 back to satellite 1 to another base station to a different subscriber unit, and utilizing the communication protocols to the extent disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B</p> |
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| | | <p>serial communication path extending through a base station, the satellite, the central station, the satellite, and back to a base station, wherein at least some of said base stations serve a set of subscriber units dispersed over a predetermined geographic area and comprise communication means ..., subscriber transmitter units ..., data processing means ... [and] means for selecting</p> <p><u>Structure:</u> A serial communication path from subscriber units 4, 4', 4'', or 4''' (Figs. 1, 2, 6A, 7A, 9A) connected to remote receivers 20A–N or 22–22', each connected by a link to a local area base station repeater cell [cell base station] 3, which is connected to satellite 1 to audience control and data center 2 back to satellite 1 to another base station to a different subscriber unit, and utilizing the</p> | |
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| | | communication protocols to the extent disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B. | |
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The parties rest essentially on the *Verizon* case briefing, although Sensus argues for expanding the identified function if construed as a means-plus-function term. SENSUS VERIZON BR. at 10. The parties in the *Verizon* case disagreed whether the claim language recited sufficient structure remove the term from the ambit of 35 U.S.C. § 112, ¶ 6.

Although the claim uses “means,” the claim includes sufficient structure to avoid construction as a means-plus-function term. Claim 16 of the ‘101 Patent, which is exemplary of the usage of this term, recites:

means for providing for two-way digital communications between two different subscriber units by a serial communication path extending through a base station, the satellite, the central station, the satellite and back to a base station, wherein at least some of said base stations serve a set of subscriber units dispersed over a predetermined geographic area and comprise communication means between the subscriber units with the base station including a set of station receive only terminals remote from the base station coupled by a communication link with the base station for conveying transmitted messages from subscriber units in the subdivided portion of said geographic area in the vicinity of the receive only terminals to the base station

‘101 Patent at 13:5-19. Where, as here, “a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format.” *Sage Products, Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427-28 (Fed. Cir. 1997). Accordingly, the Court finds this term is not governed by 35 U.S.C.

§ 112, ¶ 6.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bell's Proposed Construction |
|--|--|--|---|
| <p>facilities for communicating from the subscriber units when moved through different geographic zones <i>'101 Patent, Claims 19-20</i></p> | <p>Subject to § 112, ¶ 6:</p> <p>Function: communicating from the subscriber units when moved through different geographic zones;</p> <p>Structure: Subscriber units 4, 4', 4'', or 4''' (Figs. 1, 2, 6A, 7A, 9A), including software control facilities or Software Control Data Processor 54 and the corresponding set-up algorithm to the extent disclosed in Fig. 6B and '101 Patent 8:15-62, 9:14-19, and equivalents.</p> | <p><i>Sensus takes no position on the construction of this claim term.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6</p> <p>Function: communicating from the subscriber units when moved through different geographic zones</p> <p>Structure: Subscriber units 4, 4', 4'', or 4''' (Figs. 1, 2, 6A, 7A, 9A), including software control facilities or Software Control Data Processor 54 and the corresponding set-up algorithm to the extent disclosed in Fig. 6B and 8:15-62, 9:14-19</p> |

Plaintiff and Bell incorporate the *Verizon* briefing by reference. Sensus does not address the term. No party adds additional argument in the present claim construction briefing.

Although the claim does not use “means,” the use of “facilities” here is inadequate to connote structure capable of performing the claimed function. As the Court previously observed, generic terms “typically do not connote sufficiently definite structure.” *Mass. Inst. of Tech.*, 462 F.3d at

1354. Unlike “base station facilities,” the claim language does not “further define[] a generic term . . . [to] add sufficient structure to avoid 112 ¶ 6.” *Cf. id.* Plaintiff’s dictionary defines “facilities, transmission” as a “[g]eneral term for equipment which acts as a bearer of information signals: . . . narrow and broadband radiocommunication systems.” PL.’S REPLY at EX. D. Without further context, “facilities” is essentially a nonce word encompassing virtually anything from performing the recited function. Thus, this is a means-plus-function term.

In the *Verizon* case, the defendant correctly identified the claimed function. The parties’ disagreement as to corresponding structure relates primarily to whether the function necessitates the set-up algorithm depicted in Figure 6 and discussed at length in column 8. Plaintiff contended the set-up algorithm is not part of the function of “communicating.” The specification explicitly states the algorithm depicted in Figure 6B “relate[s] to the communication sequences . . . between home units 4, the cell site utilizing local base station 3 and local remote stationary receivers 20A-20N.” ‘101 Patent at 8:8-12. Although Plaintiff accurately noted the hand-off procedure is separately claimed in independent claim 20, the set-up algorithm cannot be divorced from the communication function recited in both claims 19 and 20. “This set up procedure is important for ‘hand-off’ of a portable unit from one stationary local remote receiver site 22 to another as fringe areas are encountered,” *id.* at 8:63-65, *i.e.*, the set-up algorithm is important when communicating from subscriber units moving through different geographic zones. This important procedure would be lacking from claim 20 if it was not incorporated in the communication function. Therefore, the Court adopts the *Verizon* defendant’s corresponding structure and defines the function as “communicating from the subscriber units when moved through different geographic zones” and defines the corresponding structure as “Subscriber units 4, 4’, 4’’, or 4’’’ (Figs. 1, 2, 6A, 7A, 9A),

including software control facilities or Software Control Data Processor 54 and the corresponding set-up algorithm to the extent disclosed in Fig. 6B and ‘101 Patent 8:15-62, 9:14-19, and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|---|---|--|---|
| <p>means for transmitting digital data derived by said transducers <i>‘101 Patent, Claim 19</i></p> | <p>Plain and Ordinary Meaning, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p>If this element is to be construed according to 35 U.S.C. § 112, ¶ 6:</p> <p>Function: transmitting digital data</p> <p>Structure: transceiver 50 (FIG. 9A) 101[10:9-13]; transceiver 4 (FIG. 2) 101[5:59-66]</p> | <p><i>Sensus takes no position on the construction of this claim term.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6</p> <p>Function: transmitting digital data derived by said transducers</p> <p>Structure: Software control data processor 54, output register fixed variable 52, frequency control 57, transceiver 50 and antenna 49 (Fig. 9A), including communication protocols and algorithms to the extent disclosed in Figs. 3, 4, 6B, 7B, 8A, 8B and at 8:8-62</p> |

Plaintiff and Bell incorporate the *Verizon* briefing by reference. Sensus does not address the term. No party adds additional argument in the present claim construction briefing.

This term is presumptively a means-plus-function term and Plaintiff failed to overcome this presumption. The *Verizon* defendant correctly identified the function of “transmitting digital data

derived by said transducers.” The *Verizon* defendant’s proposal of corresponding structure, however, unnecessarily incorporated structure unrelated to transmitting. Defendant identified several components from Figure 9 “all connected to transceiver 50.” DEF.’S RESP. at 25. However, it does not necessarily follow that every component connected to some corresponding structure is also involved in the claimed function. The additional components may play a role in generating the “digital data derived by said transducers,” but the claimed function is simply transmitting that data, however generated or whatever the source. Plaintiff’s proposal correctly limited the corresponding structure to only those elements that are essential, yet adequate, to performing the function. Therefore, the Court defines the corresponding structure as “transceiver 50 (FIG. 9A) as described at ‘101 Patent 10:9-13 and transceiver 4 (FIG. 2) as described at ‘101 Patent 5:59-66, and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|--|--|--|---|
| remote receiver <i>‘546 Patent, Claim 1</i> | A receiver remote from or collocated with a transmitter, base station, and/or repeater | Equipment located in a subdivided portion of a base station’s geographic area that detects digital transmissions from subscriber units and relays them to the base station, and does not transmit to the subscriber units. | Equipment located in subdivided portions of a base station’s geographic area to relay transmissions from subscriber units to the base station |
| receive only stations <i>‘101 Patent, Claim 20</i> | A receiver for receiving transmissions | Equipment located in a subdivided portion of a base station’s geographic area that detects digital transmissions from | Equipment located in subdivided portions of a base station’s geographic area to relay transmissions from subscriber units |

| | | | |
|--|--|--|---|
| | | subscriber units and relays them to the base station, and does not transmit to the subscriber units. | to the base station |
| receive only digital receiver <i>'546 Patent, Claim 14</i> | A receiver for receiving and relaying digital communications | Equipment located in a subdivided portion of a base station's geographic area that detects digital transmissions from subscriber units and relays them to the base station, and does not transmit to the subscriber units. | Equipment located in subdivided portions of a base station's geographic area to relay transmissions from subscriber units to the base station |
| receive only terminals <i>'101 Patent, Claims 16-18</i> | No construction necessary. <u>Alternatively:</u> a receiver for receiving and relaying digital communications | Equipment located in a subdivided portion of a base station's geographic area that detects digital transmissions from subscriber units and relays them to the base station, and does not transmit to the subscriber units. | |

The parties agree that the claimed receivers are equipment that relays transmissions from subscriber units to base stations. Their disagreement over the interpretation of this term primarily turns on whether the remote receivers must only relay transmissions from the subscriber units and may never transmit anything to the subscriber units. Sensus's proposed construction would forbid any communication from the remote receiver to the subscriber unit, or any communication from the subscriber unit which was intended for that remote receiver and which would terminate at the receiver and not be relayed to the base station.

Each of the relevant claims includes location language making Sensus's location language redundant and unnecessary. *See* '101 Patent at 14:42-45 ("a base station of defined geographic area for serving a set of said subscriber units, said area is subdivided into a plurality of zones, and receive only stations located in said zones"); '546 Patent at 10-12 ("a local remote receiver disposed within one of a plurality of cell subdivision site[s] partitioned from said local base station geographic area"); '546 Patent at 14:2-3 ("a set of receive only digital receivers positioned in said subdivided zones"). Plaintiff is correct the invention encompasses a "remote receiver" collocated with a local area repeater station. *See* '101 Patent at Fig. 1. Finally, Sensus's "does not transmit to the subscriber units" language improperly imports a limitation to the claim and excludes preferred embodiments. *See* '101 Patent at Figure 1 (depicting signal 5 between subscriber unit 4 and remote receiver 20 as two-way), at 7:3-7 (describing error-checking and control signals sent between the receiver units and the subscriber units). Sensus's proposal also takes the "receive only" claim language out of context and stretches it to achieve an absurd result. In the context of the entire specification, it is clear "receive only" refers to the communication of messages to and from the base stations cells and the subscriber units. That is, the subscriber unit can only receive digital data message directly from the base station cell and not from the reception units. The reception unit's role with respect to those messages is simply to receive them from the low powered subscriber units and to pass them along to the base station cell. This does not, however, forbid routine handshaking, error checking, and other control signals from being communicated between the reception units and the subscriber units. Therefore, the Court adopts Plaintiff's proposed constructions and construes "remote receiver" as "a receiver remote from or collocated with a transmitter, base station, and/or repeater;" "receive only stations" as "a receiver for receiving transmissions;" and "receive only digital receiver" as "a

receiver for receiving and relaying digital communications.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bell’s Proposed Construction |
|---|---|--|---|
| <p>facilities in said base station and subscriber units for handing off communications between zones when communicated signals deteriorate below a given threshold <i>‘101 Patent, Claim 20</i></p> | <p>Subject to 35 U.S.C. § 112, ¶6.</p> <p>Function: handing off communications between zones when communicated signals deteriorate below a given threshold</p> <p>Structure: local area repeater station, local base station repeater cell, cell base station, cell (item 3 in FIG. 1, 2, 6A, 7A); software control facilities; 101[5:28-31]; software control data processor 54 (FIG. 9A); transceiver 50 (FIG. 9A); transceiver 4 (FIG. 2) software at SU (item 17 in FIG. 1); 101[8:8-9:44]; FIG. 6B; response unit 4 (FIG. 1); remote receiver (FIG. 6B)</p> | <p><i>Sensus takes no position on the construction of this claim term.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6</p> <p>Function: handing off communications between zones when communicated signals deteriorate below a given threshold</p> <p>Structure: Fig. 6B, 8:8-9:30 (describing receive signal strength indicators (RSSI) located in the base stations and subscriber units) ***</p> <p>If the Court concludes that this term should not be construed according to 35 U.S.C. § 112, ¶ 6, this term should be construed as:</p> <p>Receive signal strength indicators (RSSI) located in the base station and subscriber units</p> |

Plaintiff and Bell incorporate the *Verizon* briefing by reference. Sensus does not address the

term. No party adds additional argument in the present claim construction briefing.

This is a means-plus-function term because “facilities” is used as a nonce word to represent virtually anything. Unlike “facilities for communicating,” this term does have some base station context, akin to the context provided in “transmission and processing facilities.” However, unlike the transmission and processing facilities, where the facilities were components of the base station, here the facilities are simply located in a base station. The facilities here are not basic, essential elements of a base station as one of ordinary skill would understand that word to include. Indeed, the specification enters into a lengthy discussion of how this complex function of handing off is performed. *See* ‘101 Patent at 8:8-9:44. Thus, the presumption that this is not a means-plus-function term is overcome.

The *Verizon* defendant properly identified the claimed function. As noted, the specification discusses the hand-off and associated set-up procedures in Columns 8 and 9. The relevant figures and components include those Plaintiff identified. The parties further disputed whether this disclosure restricts the hand-off determination to depend on receive signal strength indicators (RSSI). The specification states a RSSI “measurement may serve as a criterion for hand-off,” ‘101 Patent at 9:8-9, indicating RSSI is not the only, nor even a necessary, criterion for hand-off. The specification does not, however, provide support for or examples of any other criterion. Therefore, the Court combines the *Verizon* defendant’s proposed structure with Plaintiff’s and defines the corresponding structure as “local area repeater station, local base station repeater cell, cell base station, cell (item 3 in FIG. 1, 2, 6A, 7A); software control facilities as described at ‘101 Patent 5:28-31; software control data processor 54 (FIG. 9A); transceiver 50 (FIG. 9A); transceiver 4 (FIG. 2) software at SU (item 17 in FIG. 1); the description at ‘101 Patent 8:8-9:44; FIG. 6B; response unit

4 (FIG. 1); remote receiver (FIG. 6B), and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---|--------------------------------------|
| <p>lower power <i>‘101 Patent, Claim 1</i> <i>‘546 Patent, Claims 1, 5, 7, 9</i></p> <p>limited power <i>‘546 Patent, Claim 14</i></p> | No Construction Necessary | Maximum transmission power of approximately one thousandth of a watt. | |
| <p>peak power in the milliwatt range <i>‘101 Patent, 16-18</i></p> | No Construction Necessary | Maximum transmission power of approximately one thousandth of a watt. | |

The parties dispute whether these terms require construction. Plaintiff argues the terms meanings are readily apparent in light of the patents-in-suit. PL.’s BR. at 7. Plaintiff further argues Sensus’s proposals are overly narrow and would render the claimed system inoperable. *Id.* Sensus contends its proposals are consistent with the specification. SENSUS RESP. at 8-10. In its supplemental briefing, Sensus argues the scope of these terms is limited by Plaintiff’s arguments distinguishing prior art that operated with a peak transmission power of 2 watts. SENSUS REEXAM BR. at 11-12. Plaintiff states its representations did not constitute a clear disavowal of scope and do not support capping the power range at 1 watt. PL.’s REEXAM RESP. at 22-23. Plaintiff further states “peak power” describes effective radiated power rather than maximum transmission power. *Id.* at 23-24.

Sensus's original proposals³ limiting transmission power to approximately one thousandth of a watt are unsupported by the specification. An objective of the patents was to provide two-way communications "with simplified low-cost subscriber units transmitting in milliwatt peak power ranges under parameters compatible with FCC licensing restrictions." '101 Patent at 3:17-21. Those parameters require a subscriber unit's maximum effective radiated power be "under twenty watts." *Id.* at 1:34-35. The specification discloses embodiments incompatible with a construction of "one thousandth of a watt." *See id.* at 9:51-57 (describing operation in a cell area with a diameter of two miles). "A claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct.'" *Globetrotter Software*, 362 F.3d at 1381 (quoting *Vitronics Corp.*, 90 F.3d at 1583).

Ultimately, Plaintiff's representations during reexamination provide the best indication of the meaning of "peak power in the milliwatt range." In response to an office action, Plaintiff argued the Martinez reference "does not teach subscriber transmitter units transmitting . . . at a peak power in the milliwatt range" because it "teaches peak power in the 2 watts range, and average power in the 1.5 milliwatt range." SENSUS REEXAM BR. EX. P at 20. Thus, "peak power in the milliwatt range" must be less than peak power in the 2 watts range. The parties seem to agree the floor for that range would be approximately one thousandth of a watt. Thus, the construction of "peak power in the milliwatt range" is "peak power between one milliwatt and 2 watts."

Finally, the specification provides the best guide for determining the meaning of "limited power" and "low power." Although the parties' briefing tends to equate these terms with "peak

³ Sensus's advocated range has evolved through the claim construction process, eventually settling at less than one watt. *See* SENSUS REEXAM BR. at 12.

power in the milliwatt range,” there is nothing in the specification strictly linking the meanings of these terms. On the contrary, the specification describes “low power subscriber interaction units” as the sort of units intended for use on the FCC 218-219 MHz band. ‘101 Patent at 1:30-35. The maximum effective radiated power of such units was less than twenty watts. *id.* at 1:33-35. Thus, the specification defines “lower power” and “limited power” to “a maximum effective radiated power of less than twenty watts.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|--|---|--|--------------------------------------|
| multiplexed <i>‘101 Patent, Claim 1</i> <i>‘546 Patent, Claims 1, 2, 5, 6</i> | No construction necessary. <u>Alternate Proposal</u> [multiplexed synchronously related digital data messages means]: messages combined in a single communication path and related in time or frequency | Combining multiple subscriber messages with a single carrier signal by assigning each subscriber unit its own time slot during which it receives and sends messages. | |

The parties dispute whether the digital data messages must be multiplexed in time, or whether other methods of multiplexing fall within the scope of the claim language. Sensus argues the patent only discloses multiplexing based on assigned time intervals. SENSUS RESP. at 12. Plaintiff contends other methods of multiplexing, such as frequency division, are disclosed in the specification. PL.’S REPLY at 7. Plaintiff further argues that, even if other methods are not disclosed, the claims should not be limited to a preferred embodiment *Id.*

The claims are not limited to multiplexing by time division. Multiplexing is “[a] technique

used in communications . . . for transmitting a number of separate signals simultaneously over a signal channel or line.” COMPUTER DICTIONARY 235 (1991); *see also* HARRY NEWTON, NEWTON’S TELECOM DICTIONARY 395 (11th ed. 1996) (defining multiplex as “to transmit two or more signals over a single channel”). The McGraw-Hill Dictionary of Scientific and Technical Terms defines “multiplex transmission” in the field of communications as “[t]he simultaneous transmission of two or more programs or signals over a single radio-frequency channel, such as by time division, frequency division, or phase division.” MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1309 (5th ed. 1994). The specification uses the term consistent with this ordinary meaning. The specification describes both time division multiplexing, *see* ‘101 Patent 6:56-63 (describing assigning time intervals for a unit to transmit during), and frequency division multiplexing. *Id.* at 9:67-10:2. The claim language, however, is not limited to those two methods. “Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004).

Having resolved the parties’ scope dispute, the Court finds a jury may benefit from an explanation of the term. The parties’ proposals, once stripped of the language restricting the claim scope to particular multiplexing methods, are consistent with each other and the plain and ordinary meaning of the term, which is the sense in which the specification uses it. Accordingly, the Court construes the term as “combined messages transmitted over a single radio-frequency channel.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|-------------|--|---------------------------------------|--------------------------------------|
|-------------|--|---------------------------------------|--------------------------------------|

| | | | |
|---|----------------------------|----------------------------|--|
| routing communications <i>'101 Patent, Claim 1</i> <i>'546 Patent, Claims 1, 2</i> | No construction necessary. | No construction necessary. | |
| routing designated digital data messages <i>'546 Patent, Claim 11</i> | | | |

The parties agree these terms do not require construction.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|---|--|--|--------------------------------------|
| remotely located <i>'101 Patent, Claim 1</i> | No construction necessary. | Located at a place other than a base station's location. | |
| remote from the base station <i>'101 Patent, Claims 16-18</i> | | | |
| located remotely [from said plurality of base station repeater cell means / from said base station] <i>'101 Patent, Claim 2</i> <i>'546 Patent, Claim 11</i> | | | |

The parties seemingly agree that where the claim language explicitly states something is located remote from a base station, it is located remote from a base station. PL.'s BR. at 14; SENSUS RESP. at 13-14; PL.'S REPLY at 6. The parties disagree, however, whether this limitation is also

found in claim 1. Sensus’s proposal would prohibit a remote receiver from being collocated with a base station, to the exclusion of the preferred embodiment depicted in Figure 1. *See* ‘101 Patent at Fig. 1 (depicting “local area repeater station and remote receiver” located together). Moreover, although claims 2 and 16-18 of the ‘101 Patent and claim 11 of the ‘546 Patent expressly state switching centers or terminals are remote from the base station, claim 1 of the ‘101 Patent does not include such a limitation. Claim terms should not be read to contain a limitation “where another claim restricts the invention in exactly the [same] manner.” *See TurboCare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1123 (Fed. Cir. 2001); *see also Phillips*, 415 F.3d at 1325 (explaining *TurboCare*). Sensus’s proposal improperly attempts to import limitations from other claims into claim 1.

Having resolved the parties’ claim scope dispute, the Court finds the terms do not require construction because their meanings are clear in the context of the claims and will be readily understandable to the jury. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008); *Fenner Inv. Ltd. v. Microsoft Corp.*, No. 6:07-cv-8, 2008 WL 3981838, at *3 (E.D. Tex. Aug. 22, 2008) (finding a court need not construe a disputed term so long as it has resolved the claim scope dispute between the parties). Although the Court does not construe these terms, the parties may not interpret them in manners inconsistent with this opinion.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---------------------------------------|--------------------------------------|
| base unit <i>‘101 Patent, Claims 9, 16–18</i> | Base station. | Base station. | |

The parties agree to the construction of this term.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|--|---|---|-------------------------------|
| assembling digital subscriber messages <i>'101 Patent, Claims 16–18</i> | No construction necessary. | No construction necessary apart from “data processing means at the base station.” | |
| disassembling said multiplexed synchronously related data messages of variable lengths <i>'546 Patent, Claim 6</i> | No construction necessary. | No construction necessary apart from “digital message organization means.” | |
| digital message organization means <i>'101 Patent, Claim 12</i> <i>'546 Patent, Claim 6</i> | <p>No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p><u>Function</u> (101:12): disassembling a variable length data message</p> <p><u>Function</u> (546:1): disassembling data messages and transmitting data</p> <p><u>Structure</u>: transceiver and equivalents thereof, as described as 50 (FIG. 9A); software control data processor 54 employing the message protocol of Fig. 4, input register 51, and output register 52 (all as shown in FIG. 9A); or packet builder</p> | <p><u>Function</u> [101:12]: Disassembles a variable length digital message for transmission on a sequence of fixed length transmission frames.</p> <p><u>Function</u> [546:6]: Disassembling said multiplexed synchronously related data messages of variable lengths and for transmitting data in a sequence of fixed length transmission frames.</p> <p><u>Structure</u>: <i>Indefinite</i>.</p> | |

| | | | |
|--|-----------------------------------|--|--|
| | (Assemble 43 as shown in FIG. 5). | | |
|--|-----------------------------------|--|--|

The parties appear to agree that no construction is necessary for the assembling / disassembling terms. For the reasons stated in the Court’s Report & Recommendation, “digital message organization means” is a means-plus-function limitation without corresponding structure. Accordingly, the limitation is indefinite and not amenable to construction.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|--|--|--|--------------------------------------|
| network hub switching center means <i>‘546 Patent, Claims 1-2</i> | No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6. <u>Function:</u> routing communications from and to subscriber units <u>Structure:</u> switch or, data control center and equivalents thereof as described as: switch control center 14 (FIG. 14) | <u>Function [546:1]:</u> Routing communications from and to a plurality of subscriber units. <u>Function [546:2]:</u> Routing communications to and from a plurality of subscriber units. <u>Structure:</u> <i>Indefinite.</i> | |
| hub switching center means located remotely from said plurality of base station repeater cell means <i>‘546 Patent, Claim 11</i> | No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6. <u>Function:</u> routing data messages <u>Structure:</u> switch or, data control center and equivalents | <u>Function:</u> Routing designated digital data messages between a first plurality of subscriber units and a corresponding first base station repeater cell in a first geographic area and a second plurality of | |

| | | | |
|--|---|--|--|
| | thereof as described as: switch control center 14 (FIG. 14) | subscriber units and a corresponding second base station repeater cell located in a second geographic areas [sic]. <u>Structure:</u> <i>Indefinite.</i> | |
|--|---|--|--|

Plaintiff argues “network hub switching center means” and “hub switching center means” were well known in the art and connote adequate structure to rebut the presumption that these are means-plus-function terms. PL.’s BR. at 12-13. Sensus argues one of ordinary skill would not understand “from the claim language alone” that either term “was the structure for performing the recited function in the claimed system.” SENSUS RESP. at 16.

One of ordinary skill in the art would understand these terms to describe structure adequate to perform the claimed functions. *See Cole v. Kimbley-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996) (finding “‘preformation means . . . for tearing’ describes the structure for supporting the tearing function (i.e., perforations)”). Network hub switching centers and hub switching centers were well-known networking components that one of ordinary skill in the art would have recognized were capable of performing the routing functions. *See MOBILE RADIO COMMUNICATIONS* 681-82 (1992) (describing “[t]he Mobile Switching Centre (MSC) is linked to the BS [Base Station] . . . and performs all the switching functions needed for the operation of the [subscriber equipment] in the group of cells it services”); STEPHEN W. GIBSON, *CELLULAR MOBILE RADIOTELEPHONE* 49, 55-56 (1987) (discussing various names and acronyms given to telecommunications networking switching components). As in *Cole v. Kimblery-Clark*, the drafter of the patents-in-suit “was clearly enamored of the word ‘means.’” 102 F.3d at 531. Although the use of the word “means” creates a presumption

these are means-plus-function terms, the “perfunctory addition of the word ‘means’ [does] nothing to diminish the precise structural character of” the claim language. *Id.* Sensus’s argument based on the reexamination, *see* SENSUS REEXAM BR. at 13-14; PL.’S REEXAM RESP. at 25-26, does not disturb this conclusion. Accordingly, Plaintiff has rebutted the presumption that these are means-plus-function terms. The Court also finds the terms do not require construction because their meanings are clear in the context of the claims and will be readily understandable to the jury. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008); *Fenner Inv. Ltd. v. Microsoft Corp.*, No. 6:07-cv-8, 2008 WL 3981838, at *3 (E.D. Tex. Aug. 22, 2008) (finding a court need not construe a disputed term so long as it has resolved the claim scope dispute between the parties). Although the Court does not construe these terms, the parties may not interpret them in manners inconsistent with this opinion.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|--|--|
| <p>communication means between the subscriber units with the base station including a set of stationary receive only terminals remote from the base station coupled by a communication link with the base station <i>‘101 Patent, Claims 16–18</i></p> | <p>No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p><u>Alternate Proposal:</u></p> <p><u>Function:</u> conveying transmitted messages from subscriber units to the base station</p> <p><u>Structure:</u> remote receivers/relay stations and wireline, telephone line, microwave, or radio link and equivalents</p> | <p><u>Function:</u> Conveying transmitted messages from subscriber units in a subdivided portion of said geographic area in the vicinity of the receive only terminals to the base station</p> <p><u>Structure:</u> Receive only terminals (remote receiver) 20, 20A; cable, microwave, or telephone line connections 21 between these receive</p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> Conveying transmitted messages from subscriber units located in a subdivided portion of base station’s geographic area to the base station.</p> <p><u>Structure:</u> Receivers 20A-N or 22 located in subdivided portions of the base</p> |

| | | | |
|--|---|--|---|
| | <p>thereof as described at: relay station(s) 20A-20N (FIG. 2); 22-22' (FIG. 6A, 7A); remote receiver(s) 20-20A (FIG. 1); link (21 in FIG. 1 of '546 patent) between 20 and 3 (FIG. 1); link 21 (FIG. 2); 101[5:2-7]; 101[3:65-4:2]; 101[5:2-9]; 101[5:54-65].</p> | <p>only terminals and local area repeater station 3; and the communication protocols for subscriber unit transmissions being received by the remote receivers and conveyed to the base station as disclosed by Figs. 3, 4, 6B, 7B, 8A & 8B</p> | <p>station 3 geographic area (Figs. 2 and 3) and linked to the base station 3. *** If the Court concludes that this term should not be construed according to 35 U.S.C. § 112, ¶ 6, this term should be construed as: Equipment located in subdivided portions of a base station's geographic area conveying transmissions from subscribers to the base station for re-transmission to a hub switching center.</p> |
|--|---|--|---|

Plaintiff observes the claim language provides structure for performing the claimed function:

“communication means . . . **including a set of stationary receive only terminals** remote from the base station **coupled by a communication link** with the base station.” *See* PL.’S BR. at 17.

“[W]here a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format.” *Sage Products*, 126 F.3d at 1427-28. Sensus and Bell argue this is a means-plus-function term. Bell essentially argues that Plaintiff has not carried its burden of rebutting the presumption that § 112, ¶ 6 applies. BELL RESP. at 8-9. Sensus argues the recitation of “a set of stationary receive only terminals remote from the base station coupled by a

communication link with the base station” is insufficient to rebut the presumption because “[t]he claimed ‘receive only terminals’ are not well known structure . . . [and] [o]ne cannot determine from the claim language itself, without consulting the specification, what is meant by the term.” SENSUS RESP. at 19. Sensus offers no legal authority for its apparent contention that the claim language must be read in isolation when determining whether it recites adequate structure to rebut the means-plus-function presumption. On the contrary, “claims must be read in view of the specification, of which they are a part.” *Phillips*, 415 F.3d at 1314 (quotation omitted); *see also TurboCare*, 264 F.3d at 1121 (turning to the written description and considering the preferred embodiment while determining whether claim language connoted structure). Although this term includes “means” language, the claim goes on to recite sufficient structure to perform the claimed function. *See Sage Products*, 126 F.3d at 1427-28. Accordingly, this is not a means-plus-function term.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---|--|
| <p>data processing means at the base station <i>‘101 Patent, Claims 16–18</i></p> | <p>If this term is governed by 35 U.S.C. § 112, ¶6:</p> <p><u>Function:</u> assembling and re-transmitting digital subscriber messages from the subscriber units via the satellite to the central station</p> <p><u>Structure:</u> packetizer/assembler, and satellite, and equivalents thereof, as described at 1</p> | <p><u>Function:</u> Assembling and re-transmitting digital subscriber messages from the subscriber units via the satellite to the central station.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> Assembling and re-transmitting digital subscriber messages from the subscriber units via the satellite to the central station.</p> <p><u>Structure:</u> Fig. 5.</p> <p>*** If the Court</p> |

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| | (FIG. 1); 1A (FIG. 1); 3A (FIG. 1); 43 (FIG. 5); 44 (FIG. 5); 40 (FIG. 2); 101[8:43-47]; 101[7:60-8:7]; 101[4:13-21]; FIG. 1. | | concludes that this term should not be construed according to 35 U.S.C. § 112, ¶ 6, this term should be construed as: Data processing and transmission equipment at the base station segregating, accumulating and formatting the messages from subscribers for re-transmission to a hub switching center. |
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The parties agree this is a means-plus-function term and agree the function is “assembling and re-transmitting digital subscriber messages from the subscriber units via the satellite to the central station.” PL.’s MOT. at 19; SENSUS RESP. at 20; BELL RESP. at 10. The parties disagree as to the corresponding structure. Sensus argues the specification does not include structure for performing the assembling function. SENSUS RESP. at 20-21. Bell argues all of the structure disclosed in Figure 5 is necessary for performing both of the claimed functions. BELL. RESP. at 10-11. Plaintiff identifies structure from Figures 1, 2, and 5. PL.’s MOT. at 19. Plaintiff argues some of the structure identified by Bell in Figure 5 is not essential to the claimed functions. *Id.*

The corresponding structure includes the transmitters 1A, 3A, and 2F from Figure 1 and 40 from Figure 2. *See* ‘101 Patent at 5:47-50 (stating “local base station repeater cell 3 communicates with the satellite system via directed dish antenna 3A”). The specification describes the process of assembling messages with reference to Figure 5:

The cell site transmission system 40 thus processes a set of packets in the manner shown in FIG. 5 to accumulate subscriber messages of variable length in a set of serial transmissions for transmitting to the satellite at higher transmission frequency. Accordingly packet builders 41, 41A, etc. are individually assigned to a responding one of simultaneously active subscribers until the subscriber's variable length message of n 240 bit frames is completed, and after pricing 42 the messages are accumulated 43, synchronously timed 45 and transmitted to the satellite 44.

Id. at 7:60-8:2. One of ordinary skill in the art would understand the packet building, pricing, accumulating, and synchronizing structures of Figure 5 to reference a packet builder or packetiser, a device well-known in the art. See RAYMON STEELE, MOBILE RADIO COMMUNICATIONS 68-69 (1992); see also *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1359-60 (Fed. Cir. 2004) (stating “it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure”); *S3 Inc. v. NVIDIA Corp.*, 259 F.3d 1364, 1371 (Fed. Cir. 2001) (stating “patent documents need not include subject matter that is known in the field of the invention and is in the prior art”).

Therefore, the Court defines the function of this term as “assembling and re-transmitting digital subscriber messages from the subscriber units via the satellite to the central station” and identifies the corresponding structure as “transmitters 1A, 3A, 2F (Fig. 1), 40 (Fig. 2); Packet Builders 41-41A, Price Packets 42, Assemble 43, Time 45, and VSAT 44 (Fig. 5), and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|--|--|--|--------------------------------------|
| said base station including means to receive messages from said | No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6. | <u>Function:</u> To receive messages from said subscriber units through a single one | |

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| <p>subscriber units through a single one of said receive only terminals <i>'101 Patent, Claim 17</i></p> | <p><u>Alternate Proposal:</u></p> <p><u>Function:</u> receive messages from subscriber units through a single receive only terminal.</p> <p><u>Structure:</u> discrete subscriber unit transmission frequencies assigned to different remote receivers and equivalents thereof as described at 101[8:27-9:14].</p> | <p>of said receive only terminals.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | |
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The Court declines to construe this term at this time.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|--|---|---|--|
| <p>subscriber units having means for selecting a transmission carrier frequency in a plurality of the frequency bands <i>'101 Patent, Claim 18</i></p> | <p><u>Function:</u> selecting a transmission carrier frequency.</p> <p><u>Structure:</u> Frequency control 57 in Fig. 9A, the algorithm of selecting frequency is disclosed in Fig. 6B and at 101[8:8-62] & [9:4-13].</p> | <p><u>Function:</u> Selecting a transmission carrier frequency in a plurality of the frequency bands.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> Selecting a transmission carrier frequency.</p> <p><u>Structure:</u> Frequency control 57 in Fig. 9A, the algorithm of selecting frequency is disclosed in Fig. 6B and at 8:8-62.</p> |

The parties agree this is a means-plus-function term. PL.’s MOT. at 21; SENSUS RESP. at 24; BELL RESP. at 11. The parties agree the function is “selecting a transmission carrier frequency,” with Sensus further adding “in a plurality of the frequency bands.” PL.’s MOT. at 21; SENSUS RESP. at 24; BELL RESP. at 11. Plaintiff and Bell agree the corresponding structure is control 57 in Figure 9A and the algorithm for selecting frequency disclosed in Figure 6B and in the ‘101 Patent at 8:8-62. PL.’s MOT. at 21-22; BELL RESP. at 11-12.

The specification discloses the process of a subscriber unit selecting a transmission carrier frequency. *See* ‘101 Patent at 8:8-62 (discussing Figure 6B). Frequency control section 57 is clearly linked to this process of “set[ting] the transmission carrier frequency during set up procedures.” *Id.* at 10:28-30. Even without this detailed explanation of the frequency control unit, one of ordinary skill in the art would have understood the necessary structure based on its disclosure in Figure 9. *See S3 Inc.*, 259 F.3d at 1371 (an applicant need not “include a technical treatise for the unskilled reader” when disclosing elements widely known in the art). Accordingly, the Court defines the function as “selecting a transmission carrier frequency in a plurality of the frequency bands” and identifies the corresponding structure as “Frequency Control 57 (Fig. 9) operating as described in ‘101 Patent 8:8-62, 10:28-30, and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|--|---|---|--------------------------------------|
| message accumulation means <i>‘101 Patent, Claim 3</i> <i>‘546 Patent, Claim 12</i> | <u>Function [101:3]:</u> store and retransmit digital message packets from identified subscriber units | <u>Function [101:3]:</u> Operative to store and retransmit digital message packets from identified subscriber units comprising a | |

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| | <p><u>Function</u> [546:12]: store and retransmit digital message packets received from subscriber units</p> <p><u>Structure</u>: EON agrees with the structure identified by Sensus.</p> | <p>sequence of subscriber transmission frames.</p> <p><u>Function</u> [546:12]: Storing and retransmitting digital message packets received from said at least one of said plurality of subscriber units, said message packets comprising a sequence of subscriber transmission frames.</p> <p><u>Structure</u>: Buffer memory (7:10–12), and directed dish antenna 3A that communicates with satellite 1 (Figs. 1 & 2).</p> | |
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The parties agree this is a means-plus-function term and agree on the corresponding structure. The parties generally agree on the claimed functions, but Sensus’s proposal is more complete. Therefore, the Court defines the claimed functions as “operative to store and retransmit digital message packets from identified subscriber units comprising a sequence of subscriber transmission frames” and “storing and retransmitting digital message packets received from said at least one of said plurality of subscriber units, said message packets comprising a sequence of subscriber transmission frames” and identifies the corresponding structure as “buffer memory (7:10–12), and directed dish antenna 3A that communicates with satellite 1 (Figs. 1 & 2), and statutory equivalents.”

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|--|---|---|-------------------------------|
| <p>processing means <i>'101 Patent, Claim 3</i></p> | <p><u>Function:</u> Retransmission of the digital message packets to the hub switching center by satellite.</p> <p><u>Structure:</u> satellite and equivalents thereof.</p> | <p><u>Function:</u> Retransmission of the digital message packets to the hub switching center by satellite.</p> <p><u>Structure:</u> A satellite and equivalents thereof.</p> | |

The parties agree on the function and corresponding structure.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|--|--|--|-------------------------------|
| <p>assembling means <i>'101 Patent, Claim 5</i></p> | <p>No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p><u>Function:</u> accumulating and transmitting messages</p> <p><u>Structure:</u> packet builder/assembler and satellite link and equivalents thereof, as described at: 1 (FIG. 1); 1A (FIG. 1); 3A (FIG. 1); 43 (FIG.5); 44 (FIG. 5); 40 (FIG. 2); 101[8:43-47]; 101[7:60-8:7]; 101[4:13-21].</p> | <p><u>Function:</u> Accumulating the messages from said n cell sites and transmitting the accumulated messages over said transmission means at a message data bit capacity of n times 2.560 kbaud.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | |

The parties generally agree on the identified function but disagree whether the specification contains adequate corresponding structure to perform that function. For the reasons stated in the Report & Recommendation, this term is not indefinite. The Court defines the function as “accumulating the messages from said n cell sites and transmitting the accumulated messages over said transmission means at a message data bit capacity of n times 2.560 kbaud” and identifies the corresponding structure as “transmitters 3A (Fig. 1), 40 (Fig. 2); Packet Builders 41-41A, Price Packets 42, Assemble 43, Time 45, and VSAT 44 (Fig. 5), and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---|--------------------------------------|
| means for interlacing 64 subscriber units <i>‘101 Patent, Claim 6</i> | <u>Function:</u> interlacing 64 subscriber units for transmitting simultaneously multiplexed messages at said base station <u>Structure:</u> frequency control 57 (FIG. 9A); and packet builder/assembler and timer, and equivalents thereof as described at: 41, 41A, 43, 45 (FIG. 5); 101[6:34-46]. | <u>Function:</u> Interlacing 64 subscriber units for transmitting simultaneously multiplexed messages at said base station. <u>Structure:</u> <i>Indefinite.</i> | |

The parties agree on the identified function but disagree whether the specification contains adequate corresponding structure to perform that function. For the reasons stated in the Report & Recommendation this term is not indefinite. The Court defines the function as “interlacing 64 subscriber units for transmitting simultaneously multiplexed messages at said base station” and

identifies the corresponding structure as “frequency control 57 (FIG. 9A); and packet builder/assembler and timer, and statutory equivalents thereof as described at: 41, 41A, 43, 45 (FIG. 5); ‘101 Patent at 6:34-46.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---|--|
| <p>means for transmitting ‘101 Patent, Claim 8 ‘546 Patent, Claim 10</p> | <p>[Means for transmitting messages from the different subdivided cell areas on different carrier frequencies.]</p> <p>[Means for transmitting messages from each of at said least one base station repeater cell means subdivision sites on a different carrier frequency.]</p> <p>No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p><u>Alternate Proposal:</u> <u>Function</u> transmitting digital data</p> <p><u>Structure:</u> discrete transmission frequencies selected by the algorithm described at: FIG.</p> | <p><u>Function [101:8]:</u> Transmitting messages from the different subdivided cell areas on different carrier frequencies.</p> <p><u>Function [546:10]:</u> Transmitting messages from each of at said [sic] least one base station repeater cell means subdivision sites on a different carrier frequency.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | <p>This element should be construed according to 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function:</u> Transmitting digital data.</p> <p><u>Structure:</u> Fig. 9A, the algorithm of selecting frequency is disclosed in Fig. 6B and at 8:8-62.</p> |

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| | 9A; FIG. 6B; 101[8:8-62]; 101[9:14-20] | | |
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The Court declines to construe this term at this time.

| Term | Plaintiff's Proposed Construction | Sensus's Proposed Construction | Bells's Proposed Construction |
|---|--|---|--------------------------------------|
| means for retransmitting <i>'546 Patent, Claim 12</i> | No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6. <u>Alternate Proposal:</u> If this element is to be construed according to 35 U.S.C. § 112, ¶ 6: <u>Function:</u> Retransmitting message packets to a hub switching center via a satellite <u>Structure:</u> satellite link and equivalents thereof. | <u>Function:</u> Retransmitting said message packets to a hub switching center of an interactive video network system via a satellite. <u>Structure:</u> <i>Indefinite.</i> | |

The parties disagree whether this is a means-plus-function term. Sensus argues the specification must be consulted to identify appropriate structure because the claim language does not recite adequate structure for performing the claimed function. Plaintiff argues the claim language expressly calls for retransmission by satellite. The claim recites “means for retransmitting said message packets to a hub switching center of an interactive video network system via a satellite.” The specification expressly refers to retransmitting messages from a given base station to other base

stations or to a service center by way of satellite. *See, e.g.*, ‘101 Patent at 8:3-7. Thus, the satellite recited in the claim language is adequate structure for performing the claimed retransmission function. Accordingly, this is not a means-plus-function term. Given the claim language’s express recitation of the means for retransmitting, further construction is unnecessary.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|--|-------------------------------|
| <p>means for compensating ‘101 Patent, Claim 9 ‘546 Patent, Claim 13</p> | <p>No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6.</p> <p><u>Alternate Proposal:</u> If this element is to be construed according to 35 U.S.C. § 112, ¶ 6:</p> <p><u>Function</u> [546:13]: compensating for the time of propagation</p> <p><u>Structure:</u> guard bands between transmission timeframes and equivalents thereof as described at: 4, 22, and 3 (FIG. 7A); guard band (FIG. 7B, 8A); 36 (FIG. 2); 546[9:16-36]; 101[9:44-66].</p> | <p><u>Function</u> [101:9]: Compensating for the time of propagation of messages between the different individual subscriber units and the base station data processing facilities.</p> <p><u>Function</u> [546:13]: Compensating for the time of propagation of said multiplexed synchronously related data messages between said subscriber units and said data processing means of said base station repeater cell means.</p> <p><u>Structure:</u> <i>Indefinite.</i></p> | |

This is presumably a means-plus-function term and the claim language does not recite any structure for rebutting the presumption. The claimed function, “compensating for the time of

propagation of said multiplexed synchronously related data messages between said subscriber units and said data processing means of said base station repeater cell means,” refers to compensating for the time it takes a signal to travel from one place to another. This specification depicts this problem in Figure 7A and observes “[f]or keeping the message bits accurately synchronized within the system, the delays in transit time of r-f transmissions must be accounted for.” ‘101 Patent at 9:46-49. The specification goes on to illustrate a solution in Figure 7B. Figure 7B depicts “guard bands” separating transmission frames by some amount of time. *See id.* at 9:51-66. The specification explicitly states this feature solves the transmission delay problem and negates the need for other corrective measures. *Id.* Plaintiff also advocates including in the corresponding structure the guard bands depicted in Figure 8A. Those guard bands, however, provide buffer between transmission frequencies and do not compensate for transmission propagation delay. Therefore, the Court defines the function as “compensating for the time of propagation of said multiplexed synchronously related data messages between said subscriber units and said data processing means of said base station repeater cell means” and identifies the corresponding structure as “guard bands as depicted in Figure 7B and described at ‘101 Patent 9:44-66, and statutory equivalents.”

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|--|---|---|--------------------------------------|
| base station repeater cell means <i>‘546 Patent, Claim 2</i> | No construction necessary, and this term is not governed by 35 U.S.C. § 112, ¶6. <u>Alternate Proposal:</u> <u>Function:</u> communicating with a plurality of | <u>Function:</u> Communicating with a plurality of subscriber units. <u>Structure:</u> Local area repeater station 3 (Fig. 1), local base station repeater cell 3 (Fig. 2), cell base | |

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| | <p>subscriber units.</p> <p><u>Structure:</u> local area repeater station, local base station repeater cell, cell base station, cell (3 in FIGS. 1, 2, 6A, 7A), cell site transmitter 8 (FIG. 2); 546[4:635:5]; 546[6:47-51]; 546[7:54-61]; 546[8:5-16]; 546[5:30-34].</p> | station 3 (Fig. 6A). | |
|--|---|----------------------|--|

The parties disagree whether this is a means-plus-function term. As discussed, *supra*, “base station” possessed a well defined meaning in the art connoting structure. Nothing in the claim language implies the claimed function is such that a traditional base station repeater cell is inadequate structure. Accordingly, the presumption that this is a means-plus-function claim is rebutted. No further construction is necessary.

| Term | Plaintiff’s Proposed Construction | Sensus’s Proposed Construction | Bells’s Proposed Construction |
|---|--|---|--------------------------------------|
| <p>two-way communication ‘101 Patent, Claim 1 ‘546 Patent, Claims 1, 2</p> <p>two-way digital communications ‘101 Patent, Claims 16–18</p> | No construction necessary. | Having subscriber units that receive messages from and send messages to the network system. | |

The parties dispute whether these terms require construction. Sensus’s claim construction

proposal is essentially a request for the Court to pass judgment on the merits of its non-infringement position. This is improper at this stage. The question is what these terms mean as used in the patents-in-suit, not whether Sensus's accused products are "portable" or "mobile." "A claim is construed in the light of the claim language, the other claims, the prior art, the prosecution history, and the specification, *not* in light of the accused device." *SRI Int'l*, 775 F.2d at 1118. Therefore, the Court declines to construe this term at this time.

CONCLUSION

For the foregoing reasons, the Court adopts the constructions set forth above.

So ORDERED and SIGNED this 11th day of August, 2010.



JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE