

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TQ BETA LLC,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No. 14-CV-848-LPS-CJB
	:	
DISH NETWORK CORPORATION;	:	
DISH DBS CORPORATION;	:	
DISH NETWORK L.L.C.;	:	
ECHOSTAR CORPORATION;	:	
ECHOSTAR TECHNOLOGIES, L.L.C.;	:	
HUGHES SATELLITE SYSTEMS	:	
CORPORATION;	:	
SLING MEDIA, INC.,	:	
	:	
Defendants.	:	

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MEMORANDUM OPINION

January 28, 2016
Wilmington, Delaware



STARK, U.S. District Judge:

On June 30, 2014, Plaintiff TQ Beta LLP (“TQ Beta” or “Plaintiff”) filed suit against Defendants DISH Network Corporation, DISH DBS Corporation, DISH Network L.L.C., EchoStar Corporation, EchoStar Technologies, L.L.C., Hughes Satellite Systems Corporation, and Sling Media, Inc. (“Defendants”), alleging infringement of U.S. Patent No. 7,203,456 (the “456 patent”).

The ‘456 patent relates to technology for streaming content from a home receiver to a remote media player via a world-wide network. The home receiver collects content from a broadcast and encodes the content signal into a form suitable for transmission over the worldwide network. The home receiver then streams the encoded signal over the network to a remote media player, which receives the encoded signal and decodes the information so that it can be played back, or “reproduced,” later.¹ The invention requires a delay between the time when the broadcast signal is collected at the home receiver and the time when it is reproduced at the remote receiver. Because this delay must be greater than the inherent transmission delay of the system, the claims exclude “live streaming.”²

The parties submitted technology tutorials and completed claim construction briefing. (D.I. 69, 71, 87, and 89) The Court held a hearing on November 30, 2015. (*See* D.I. 114 (“Tr.”))

LEGAL STANDARDS

The ultimate question of the proper construction of a patent is a question of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citing *Markman v. Westview*

¹Defendants refer to the described features, collectively, as “place-shifting.”

²Defendants refer to this requirement as “time-shifting.”

Instruments, Inc., 517 U.S. 370, 388-91 (1996)). “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) (internal quotation marks omitted).

“[T]here is no magic formula or catechism for conducting claim construction.” *Id.* at 1324.

Instead, the court is free to attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.*

“[T]he words of a claim are generally given their ordinary and customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312-13 (internal citations and quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). The patent 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.” *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While “the claims themselves provide substantial guidance as to the meaning of particular claim terms,” the context of the surrounding words of the claim also must be considered.

Phillips, 415 F.3d at 1314. Furthermore, “[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent” *Id.* (internal citation omitted).

It is likewise true that “[d]ifferences among claims can also be a useful guide For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-

15 (internal citation omitted). This “presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316. It bears emphasis that “[e]ven 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.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)) (internal quotation marks omitted).

In addition to the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996). The prosecution history, which is “intrinsic evidence,” “consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

In some cases, “the district court will need to look beyond the patent’s intrinsic evidence

and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva*, 135 S. Ct. at 841. Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries “endeavor to collect the accepted meanings of terms used in various fields of science and technology.” *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* Overall, while extrinsic evidence “may be useful” to the court, it is “less reliable” than intrinsic evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

Finally, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows

that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (quoting *Modine Mfg. Co. v. U.S. Int’l Trade Comm’n*, 75 F.3d 1545, 1550 (Fed. Cir. 1996)).

CONSTRUCTION OF DISPUTED TERMS

I. Method Claims

- A. “reproducing the information during a second time frame, wherein a delay between the first time frame and the second time frame is greater than a delay caused by receiving the signal, encoding the received signal, transmitting the encoded signal, receiving the encoded signal, and decoding the encoded signal”³

Plaintiff
This claim term does not require construction.
Defendants
“reproducing the information during a second time frame, wherein the decoded signal is stored for playback at a later time frame as desired by a user”
Court
This claim term does not require construction.

The parties’ disagreement centers on the meaning of the word “delay.” Plaintiff argues that the claim term itself defines “delay” as the time between when the home receiver receives a broadcast signal (the “first time frame”) and the time when the remote media player reproduces it (the “second time frame”). Plaintiff further asserts that the claim requires only that this amount of time be greater than the system’s inherent transmission delay – the minimum time necessary to complete the functions of receiving the signal, encoding the signal, transmitting the encoded signal, and receiving and decoding the encoded signal at the remote player. (D.I. 69 at 3)

Defendants agree that the claim requires the delay Plaintiff acknowledges, but contend

³This term appears in claim 11 of the ’456 patent.

that the intrinsic record imposes an additional limitation: that the delay result from “stor[ing]” the decoded signal at the remote media player “for playback at a later time as desired by the user.” (D.I. 71 at 6) Defendants’ construction requires that the claimed “delay” occur *after* the broadcast signal has been received by a first media player, encoded, transmitted to a second media player, received, and decoded – and also that the “delay” occur *before* the broadcast is reproduced. Defendants find support for their construction in the order in which the steps are listed in the claims: “reproducing [the signal after a] delay . . . greater than a delay caused by” performing each of the previous steps. ’456 patent col. 8:1-18.

The steps of a method claim need not always be performed in the order in which they are written. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-70 (Fed. Cir. 2003). It is necessary to look to the claim language to determine if, as a matter of “logic or grammar,” the listed steps must be performed in the order written. *See id.* If they need not be performed in the order written, then it is appropriate to consider whether the rest of the specification “directly or implicitly requires such a narrow construction.” *Id.* (internal quotation marks omitted).

The Federal Circuit has held that logic requires a particular order of steps when one step cannot be performed unless another step precedes it. *See, e.g., Loral Fairchild Corp. v. Sony Electronics Corp.*, 181 F.3d 1313, 1322 (Fed. Cir. 1999); *Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc.*, 152 F.3d 1368, 1375-76 (Fed. Cir. 1999). Here, the “delay” limitation is listed after each of the other steps because each of those steps is necessary to define what a delay is and how it is calculated. *See* ’456 patent col. 8:1-18 (defining “delay” as difference between “the first time frame” – when signal from broadcast is received – and “second time frame” – when signal is reproduced – and requiring that, at minimum, its duration exceed time required to complete

receiving, encoding, transmitting, and decoding steps). But the claim neither explicitly requires nor implicitly suggests that the portion of the delay not attributable to transmission must occur after each of the other method steps has occurred. Rather, the plain and ordinary meaning of the claim term requires only that the “delay” occur between the initial receipt of the broadcast and its reproduction. Thus, the Court finds that the logic of the claims does not require the “delay” to occur at the last, “reproducing” step of the method. Nor does the Court perceive anything in the grammar of the claims that would require the particular order of steps proposed by Defendants.

Because the logic and grammar of the claims do not justify departing from the plain and ordinary meaning of the disputed term, the Court must next determine whether either the specification or prosecution history requires Defendants’ narrow construction.⁴ The Court may depart from giving disputed claim terms the full scope of their plain and ordinary meaning to a person of ordinary skill in the art if a patentee either acts as its own lexicographer and expressly defines a claim term, or clearly and unambiguously disclaims, or “disavows,” claim scope. *See Thorner*, 669 F.3d at 1365; *Phillips*, 415 F.3d at 1316.

A patentee need not express its intent to exclude claim scope using “explicit[ly] definitional” language. *SciMed Life Sys. Inc. v. Advanced Cardiovascular Sys. Inc.*, 242 F.3d 1337, 1344 (Fed. Cir. 2001). However, any implicit definition or disclaimer must be “so clear

⁴In their briefing and at oral argument, the parties discussed the relevance of claim construction positions Defendants have taken during ongoing inter partes review (“IPR”) proceedings. As the parties noted, the legal standards applicable to claim construction in an IPR – the “broadest reasonable interpretation” – are different than those that apply in district court litigation. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1276 (Fed. Cir. 2015) *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 2016 WL 205946 (U.S. Jan. 15, 2016). Thus, while the positions the parties have taken in the IPR are not irrelevant – and the Court has considered them – they are not binding, on either the parties or the Court.

that it equates to an explicit one.” *Thorner*, 669 F.3d at 1638.

In this case, the patentee did not clearly and unmistakably define “delay” as being the result of storing the decoded signal at the remote media player. Nor did it disclaim embodiments that do not store a decoded signal.

The Court is not persuaded by Defendants’ argument that the patentee disavowed claim scope by including in the specification primarily embodiments of the invention in which a delay occurs as a result of storing information for later playback. (D.I. 71 at 6-12) Many (though not all) of the claims include a step or means for storing information for later playback. It is unsurprising that the specification often refers to a storing step. In any event, the prevalence of embodiments with a particular feature does not mean that every claimed embodiment must include that feature. *See, e.g., Rambus Inc. v. Infineon Techs. Ag*, 318 F.3d 1081, 1094 (Fed. Cir. 2003).

Defendants emphasize the specification’s statement that Figure 4 of the patent shows “*a* method for time and space domain shifting of a broadcast signal *in accordance with* the present invention.” ’456 patent col. 5:50-52 (emphasis added). This is exemplary, non-exclusive language, not of the type found to constitute a disclaimer (e.g., “the present invention requires” or “all embodiments of the present invention”). *See, e.g., SciMed*, 242 F.3d at 1343-44; *Regents of Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 936 (Fed. Cir. 2013); *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006). Defendants have not shown that the position Plaintiff is advocating is not in accordance with the present invention.

Finally, the prosecution history does not provide a sufficient basis to adopt Defendants’ narrow construction. A patentee may narrow claim scope during prosecution of a patent if the

patentee “clear[ly] and unmistakab[ly]” disavows claim scope in order to obtain its patent. *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013). Here, when the patentee added the “storing” feature to claim 1 during prosecution, the patentee described the feature as “substantially similar” to the delay requirement of claim 11. (D.I. 72-1 at 30-31) Notably, the patentee did not state that the “storing” limitation was “identical” to the delay limitation of claim 11.

Having rejected Defendants’ unnecessarily narrow construction, the Court agrees with Plaintiff that the term carries its full plain and ordinary meaning to a person of ordinary skill in the art, and requires no construction.⁵

B. “receiving a signal broadcast in a first geographic location”⁶

Plaintiff This claim term does not require construction.
Defendants “receiving a signal from a local broadcast covering a limited broadcast area”
Court “receiving a signal from a local broadcast covering a limited broadcast area”

During prosecution of the ’456 patent, the patentee explained that the claimed invention is

⁵Defendants contend that failing to adopt their proposed construction will result in the claims being invalid for lack of written description or enablement. Generally, questions of validity such as inadequate written description or enablement are premature at the claim construction stage of litigation. *See Hill-Rom Servs.*, 755 F.3d at 1374 (“Enablement concerns do not justify departing from the plain and ordinary meaning of [a term].”); *Phillips*, 415 F.3d at 1327 (“While we have acknowledged the maxim that claims should be construed to preserve their validity, . . . we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction. . . . Instead, we have limited the maxim to cases in which the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous.”).

⁶This term appears in claim 11 of the ’456 patent.

useful in “a situation where a listener is geographically separated from a local broadcast area, yet . . . still wishes to receive the local broadcast.” (D.I. 72-1 at 6) The parties disagree about whether claim 11 covers a method that can be applied only in this situation. Specifically, the Court must resolve whether claim 11’s “signal broadcast in a first geographic location” must be a signal from a “local broadcast” covering a “limited broadcast area.”⁷

Like claim 11, claim 1 also recites a “first geographic location.” The intrinsic record is clear that in the context of claim 1, the “local broadcast” and “limited broadcast area” requirements are claim limitations. For example, during prosecution the patentee distinguished claim 1 from the prior art by explaining that claim 1 involved receiving a signal in a first geographic location and transmitting that signal to a “separate and distinct” second geographic location. (D.I. 72-1 at 7) The claim itself “define[s]” the term “first geographic location” as “an area where a strength of the signal [from a broadcast station] is sufficient for a receiver to detect the signal, the signal containing information capable of being reproduced.” ’456 patent col. 6:58-61. Similarly, the second geographic location is defined as “an area where the strength of the signal is insufficient for the receiver to detect the signal.” ’456 patent col. 7:1-3.

Claim terms are presumed to be used consistently throughout a patent. *See Research Plastics, Inc. v. Fed. Packaging Corp.*, 421 F.3d 1290, 1295 (Fed. Cir. 2005). Hence, Defendants’ proposed construction here is presumptively correct. However, as Plaintiff points out, claim 11 differs from claim 1 in ways that might support a conclusion that the same claim term has different meanings in each claim. Specifically, unlike claim 1, claim 11 does not

⁷The specification adds that a “local broadcast” is one that covers only a “limited broadcast area limited by the transmission power of the broadcast station.” ’456 patent col. 1:21-23.

mention reproducing the signal in a “second geographic location” and does not explicitly define “first geographic location.” However, the Court is not persuaded that these differences rebut the presumption. Importantly, according the disputed term its plain and ordinary meaning to one of ordinary skill in the art would render the claim limitation superfluous, something the Court generally should avoid. *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”). Moreover, during prosecution, the examiner stated that both claims 1 and 11 “are clear that prior to the transmission of an encoded signal over the world-wide network, the original signal is received from a local broadcast.” (D.I. 72-1 at 9) The Court will adopt Defendants’ proposed construction.

C. “second geographic location”⁸

<p>Plaintiff This claim does not require construction.</p>
<p>Defendants “an area where the strength of the signal is insufficient for a receiving device to detect the signal”</p>
<p>Court “an area where the strength of the signal is insufficient for a receiving device to detect the signal”</p>

As with the previous term, the parties disagree about whether the “second geographic location” is limited by the geographic scope of the original signal. The Court agrees with Defendants that the claim is so limited.

During prosecution, the patentee explained that the “first” and “second” geographic

⁸This term appears in claim 16 of the ’456 patent.

locations of claim 1 are distinct areas: the first geographic location is the area that falls within the broadcast area of a local signal, and the second geographic location is the area that falls outside of that broadcast area. (D.I. 72-1 at 7) The patentee argued during prosecution that these “separate and distinct” geographic locations distinguish the method of claim 1 from the prior art, which included methods that involved receiving a nationwide signal. (*Id.*) The patentee then explained that claim 16’s recitation of “a second geographic location” made the claim “similar to claim 1” – and thus patentable over the same prior art for the same reasons.

Therefore, the Court adopts Defendants’ construction.

II. Means-Plus-Function Claims

Section 112 ¶ 6 provides that a patentee may express an element of a claimed invention “as a means or step for performing a specified function without . . . recitin[g] the structure, material, or acts” for performing that function. “In exchange for the ability to use a generic means expression for a claim limitation, the [patentee] must indicate in the specification what structure constitutes the means.” *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1363 (Fed. Cir. 2012) (internal quotation marks omitted). A means term is construed to include only means for performing the claimed function that are disclosed in the specification, and “equivalents thereof.” 35 U.S.C. § 112 ¶ 6.

The parties agree that certain disputed terms are written in means-plus-function form. The parties also agree that the scope of these claim terms includes both the means disclosed in the specification and “equivalents thereof.” (Tr. at 87, 92) However, they disagree as to whether the Court should include the words “and equivalents” in its constructions.

The Court agrees with Defendants that it is not necessary to include these words in the

construction, and it may be confusing to the jury if the Court were to do so. In the context of Section 112 ¶ 6, the term “equivalents” has a specific, legal meaning. Two structures are equivalent only if a fact-finder determines that the differences between the structures are “insubstantial,” given the manner in which each structure achieves the claimed function. *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1435 (Fed. Cir. 2000). Further, an accused structure can be “equivalent” to the structure disclosed in a patent only if the accused structure was available at the time the patent issued. *See Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1320 (Fed. Cir. 1999). The Court will rely on the parties to propose jury instructions that correctly reflect this law, without unnecessarily risking jury confusion, and hence will not include the words “and equivalents” in the claim construction.⁹

- A. “means for receiving a second broadcast via a world wide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”¹⁰**

Plaintiff

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112(f).

Function: “receiving a second broadcast via a worldwide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”

Corresponding Structure: “a network coupling system, such as a network adapter, and equivalents”

⁹The Court’s decision to exclude “and equivalents” from its construction resolves the parties’ dispute for the term “means, coupled to said decoding means, for storing the decoded signal.” That term appears in claim 16 of the ’456 patent. Because the parties otherwise agreed about the meaning of this term, the Court will not discuss it further in this opinion.

¹⁰This term appears in claim 16 of the ’456 patent.

Defendants

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “receiving a second broadcast via a worldwide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”

The term “second geographic location” should be construed as “an area where the strength of the signal is insufficient for a receiving device to detect the signal.”

Corresponding Structure: “a network coupling system for communicating over a world wide network, such as a digital subscriber line (DSL) modem, an Ethernet adapter, a dial-up modem, or a cable modem”

Court

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “receiving a second broadcast via a worldwide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”

The term “second geographic location” is construed as “an area where the strength of the signal is insufficient for a receiving device to detect the signal.”

Structure: “a network coupling system for communicating over a world wide network, such as a digital subscriber line (DSL) modem, an Ethernet adapter, a dial-up modem, a cable modem, or any similar network adapter”

The parties agree that this is a means-plus-function limitation subject to 35 U.S.C. § 112, ¶ 6 and agree as to the claimed function. The parties disagree about the corresponding structure. A structure disclosed in the specification qualifies as corresponding structure if the specification or the prosecution history “clearly link[s] or associate[s it] with the claimed function.” *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1363 (Fed. Cir. 2012).

The parties agree that the '456 patent “clearly links” the function of “receiving” a second broadcast signal to a “network coupling system” structure. The text of the '456 patent explains

that this network coupling system is “for communicating over [a] world wide network” and may include, for example, “a digital subscriber line (DSL) modem . . . an Ethernet adapter . . . a dial-up modem . . . a cable modem . . . or any similar network adapter.” ’456 patent col. 4:47-55. In the Court’s view, the quoted language provides helpful clarification of the term by specifying that the “network coupling system” performs the “receiving” function by connecting to a worldwide network and further identifies examples of structures that can achieve the claimed function. Therefore, it is appropriate and will be helpful to the jury to include each of the disclosed examples, along with clarification that the claimed network coupling system must be capable of communicating over a worldwide network.

B. “means for decoding the encoded signal into a decoded signal”¹¹

Plaintiff

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112(f).

Function: “decoding the encoded signal into a decoded signal”

Corresponding Structure: “a media player that includes an MPEG-compatible decoder, and equivalents”

Defendants

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “decoding the encoded signal into a decoded signal”

Structure: “General purpose microprocessor running an undisclosed algorithm [indefinite]”

Court

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “decoding the encoded signal into a decoded signal”

Structure: “computer system that includes an MP3 compatible coder/decoder (CODEC)”

¹¹ This term appears in claim 16 of the ’456 patent.

The parties agree that this is a means-plus-function limitation subject to 35 U.S.C. § 112, ¶ 6 and agree as to the claimed function. The parties disagree about the corresponding structure. Specifically, the parties disagree about whether the patent discloses structure corresponding to the claimed function.

When computer software is used to perform a claimed function, the corresponding structure for the computer “algorithm is the algorithm itself.” *EON Corp. IP Holdings LLC v. AT & T Mobility LLC*, 785 F.3d 616, 621 (Fed. Cir. 2015). The structure disclosed in the specification must usually be “more than simply a general purpose computer or microprocessor.” *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). A general-purpose computer or microprocessor can be sufficient structure only when the computer or microprocessor is performing “functions [that] can be achieved . . . without special programming,” such as “processing,” “receiving,” and “storing.” *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1315-16 (Fed. Cir. 2011).

Plaintiff contends that the ’456 patent’s disclosure of a “computer system . . . includ[ing] an MP3 compatible coder/decoder (CODEC)” provides sufficient structure because a CODEC that is MP3-compatible must use a decoding algorithm chosen from a “specific class of decoding algorithms.” (D.I. 69 at 21) Defendants counter that this disclosure does not identify “an algorithm” and, therefore, provides insufficient structure. (D.I. 71 at 19)

When a patent fails to disclose sufficient structure to perform the function of a means-plus-function claim term, the claim is indefinite. *See Aristocrat*, 521 F.3d at 1331. The burden of proof to demonstrate indefiniteness is clear and convincing evidence. *See Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376-77 (Fed. Cir. 2001) (“A challenge to a claim containing a

means-plus-function limitation as lacking structural support requires a finding, by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.”); *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1366 (Fed. Cir. 2011). Here, Defendants’ indefiniteness contention turns on whether a person of ordinary skill in the art at the time of the invention would have understood the words “MP3 compatible coder/decoder” to refer to a particular algorithm. *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1384-6 (Fed. Cir. 2011); *see also AllVoice Computing PLC v. Nuance Commc'ns, Inc.*, 504 F.3d 1236, 1245 (Fed. Cir. 2007) (“Claim definiteness, as discussed earlier, depends on the skill level of a person of ordinary skill in the art. . . . In software cases, therefore, algorithms in the specification need only disclose adequate defining structure to render the bounds of the claim understandable to one of ordinary skill in the art.”).

Defendants have pointed neither to intrinsic nor extrinsic evidence to rebut Plaintiff’s contention that such a person would have had precisely such an understanding at the pertinent time. Nor do they contend that the term “MP3 coder/decoder” does not, itself, constitute a sufficient listing of steps to enable a “person of skill in the field to provide an operative software program for the specified function.” *See Typhoon*, 659 F.3d at 1385 (“Precedent and practice permit a patentee to express [the] algorithm in any understandable terms . . . [and] the amount of detail that must be included in the specification depends on the subject matter that is described and its role in the invention as a whole, in view of the existing knowledge in the field of the invention.”).

Defendants have not provided clear and convincing evidence that the claims are

indefinite. The Court concludes that the corresponding structure for this claim term is that disclosed in the specification: a “computer system that includes an MP3 compatible coder/decoder (CODEC).”

- C. “means, coupled to said decoding means, for reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”¹²

Plaintiff

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112(f).

Function: “reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”

Corresponding Structure: “a display system, display and/or speakers and equivalents”

Defendants

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”

Structure: “General purpose computer running an undisclosed algorithm [indefinite]”

Court

This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.

Function: “reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”

Structure: “a display system, display and/or speakers”

The parties again agree that this is a means-plus-function limitation and agree about the claimed function. Their dispute is whether corresponding structure is disclosed, and more particularly whether the corresponding structure for the “reproducing” means is a central processor, a display system and/or speakers, or both.

¹²This term appears in claim 16 of the '456 patent.

The specification supports the conclusion that the “reproducing” function is accomplished, at least in part, by a display system and/or speakers. ’456 patent col. 3:65-4:23, 5:27-5:42, 5:59-6:2. Although computing processes are required to enable the reproducing means to operate, the specification does not require that these computer processes occur in a separate processor.¹³ Thus, the central processor is not part of the corresponding structure. Nor have Defendants provided clear and convincing evidence that the claim term is indefinite.

III. CONCLUSION

The Court will construe the disputed claim terms consistent with the analysis and conclusions described above. An appropriate Order follows.

¹³Even if these processes did occur in a separate processor, the basic functions of retrieving and transmitting would not require disclosure of an algorithm in order to avoid a finding of indefiniteness. *See In re Katz*, 639 F.3d at 1316.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TQ BETA, INC.,	:	
	:	
Plaintiff,	:	
v.	:	
	:	C.A. No. 14-cv-848-LPS
DISH NETWORK CORPORATION;	:	
DISH DBS CORPORATION;	:	
DISH NETWORK L.L.C.;	:	
ECHOSTAR CORPORATION;	:	
ECHOSTAR TECHNOLOGIES, L.L.C.	:	
HUGHES SATELLITE SYSTEMS	:	
CORPORATION;	:	
SLING MEDIA, INC.,	:	
	:	
Defendant.	:	

ORDER

At Wilmington, this **28th** day of **January, 2016**:

For the reasons set forth in the Memorandum Opinion issued this date,

IT IS HEREBY ORDERED that the disputed claim terms of U.S. Patent No. 7,203,456 are construed follows:

Claim Term	Court's Construction
<p>“reproducing the information during a second time frame, wherein a delay between the first time frame and the second time frame is greater than a delay caused by receiving the signal, encoding the received signal, transmitting the encoded signal, receiving the encoded signal, and decoding the encoded signal”</p> <p>[’456 patent, claim 11]</p>	<p>This claim term does not require construction.</p>
<p>“receiving a signal broadcast in a first geographic location”</p> <p>[’456 patent, claim 11]</p>	<p>“receiving a signal from a local broadcast covering a limited broadcast area”</p>
<p>“second geographic location”</p> <p>[’456 patent, claim 16]</p>	<p>“an area where the strength of the signal is insufficient for a receiving device to detect the signal”</p>

<p>“means for receiving a second broadcast via a world wide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”</p> <p>[’456 patent, claim 16]</p>	<p>This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function</u>: “receiving a second broadcast via a worldwide network, the second broadcast including an encoded signal, the encoded signal containing information that was transmitted in a first geographic location in a first time frame using a first broadcast, the first broadcast occurring prior to the second broadcast”</p> <p>The term “second geographic location” is construed as “an area where the strength of the signal is insufficient for a receiving device to detect the signal.”</p> <p><u>Corresponding Structure</u>: “a network coupling system for communicating over a world wide network, such as a digital subscriber line (DSL) modem, an Ethernet adapter, a dial-up modem, a cable modem, or any similar network adapter”</p>
<p>“means for decoding the encoded signal into a decoded signal”</p> <p>[’456 patent, claim 16]</p>	<p>This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function</u>: “decoding the encoded signal into a decoded signal”</p> <p><u>Corresponding Structure</u>: “a computer system that includes an MP3-compatible coder/decoder (CODEC)”</p>
<p>“means, coupled to said decoding means, for reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”</p> <p>[’456 patent, claim 16]</p>	<p>This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function</u>: “reproducing the information in a second geographic location in a second time frame, the second time frame chosen by a user of the information”</p> <p><u>Structure</u>: “a display system, display, and/or speakers”</p>

The Court also adopts the parties’ agreed constructions for the following terms:

<p>“decoded signal”</p> <p>[’456 patent, claim 16]</p>	<p>This claim term is afforded its plain and ordinary meaning and does not require construction.</p>
<p>“means, coupled to said decoding means, for storing the decoded signal”</p> <p>[’456 patent, claim 16]</p>	<p>This limitation is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6.</p> <p><u>Function</u>: “storing the decoded signal”</p> <p><u>Corresponding Structure</u>: “ a storage device, such as semiconductor based memory or magnetic-based memory”</p>

HON. LEONARD P. STARK
UNITED STATES DISTRICT JUDGE