

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

TIVO, INC.,

Plaintiff,

VS.

AT&T Inc., et al.

Defendants,

and

MICROSOFT CORPORATION,

Intervenor.

CIVIL ACTION NO. 2:09-CV-259 (DF)

CLAIM CONSTRUCTION ORDER

Before the Court is Tivo, Inc.’s (“Tivo’s”) Opening Claim Construction Brief. Dkt. No. 148. Also before the Court are Defendants’ Responsive Claim Construction Brief, Plaintiff’s Reply Claim Construction Brief, and Defendants’ Sur-Reply Claim Construction Brief. Dkt. Nos. 151, 157, and 162, respectively. The Court held a claim construction hearing on June 1, 2011.¹ *See* Dkt. No. 185. Having considered the briefing, oral arguments of counsel, and all relevant papers and pleadings, the Court construes the disputed claim terms as set forth herein.

Also before the Court is Defendants' Motion for Leave to File Sur-reply. Dkt. No. 161.

Also before the Court are Plaintiff's Response, Defendant's Reply, and Plaintiff's Sur-reply.

¹ The Claim Construction Hearing on June 1, 2011, was a joint hearing that included the parties from Civ. Act. No. 2:09-cv-257 (hereinafter, the “Verizon Case”). In response to a Joint Motion to Stay Deadlines, the Verizon Case was stayed on September 2, 2011. Verizon Case, Dkt. No. 219. Accordingly, this Order only construes the claims that are disputed in the above-captioned case and does not construe any claim terms of the Tivo patents that are only disputed by the parties in the Verizon Case or any of the claims of the counterclaim patents asserted by the Defendants in the Verizon Case.

Dkt. Nos. 164, 165, and 167. Having considered the briefing and all relevant papers and pleadings, the Court finds that Defendants' motion should be GRANTED.

I. Background

Plaintiff alleges infringement of United States Patent Nos. 6,233,389 ("the '389 Patent"); 7,493,015 ("the '015 Patent"); and 7,529,465 ("the '465 Patent") (collectively, the "patents-in-suit"). The '465 Patent is a continuation of a continuation of the '389 Patent and both share a common specification. The '389 Patent is titled "Multimedia Time Warping System." The '465 Patent is titled "System for Time Shifting Multimedia Content Streams." The '015 Patent is titled "System for Time Shifting Multimedia Content Streams."

II. Legal Principles

A determination of patent infringement involves two steps. First, the patent claims are construed, and, second, the claims are compared to the allegedly infringing device. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1455 (Fed. Cir. 1998) (en banc). The legal principles of claim construction were reexamined by the Federal Circuit in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). The Federal Circuit in *Phillips* expressly reaffirmed the principles of claim construction as set forth in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996), *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996), and *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111 (Fed. Cir. 2004). Claim construction is a legal question for the courts. *Markman*, 52 F.3d at 979.

The Court, in accordance with the doctrines of claim construction that it has outlined in the past, will construe the claims of the '632 Patent below. *See Pioneer Corp. v. Samsung SKI*

Co., LTD., No. 2:07-CV-170, 2008 WL 4831319 (E.D. Tex. Mar. 10, 2008) (claim-construction order). These constructions resolve the parties' disputes over the literal scope of the claims.

III. U.S. Patent No. 6,233,389

The Abstract of the '389 Patent states:

A multimedia time warping system. The invention allows the user to store selected television broadcast programs while the user is simultaneously watching or reviewing another program. A preferred embodiment of the invention accepts television (TV) input streams in a multitude of forms, for example, National Television Standards Committee (NTSC) or PAL broadcast, and digital forms such as Digital Satellite System (DSS), Digital Broadcast Services (DBS), or Advanced Television Standards Committee (ATSC). The TV streams are converted to an Moving Pictures Experts Group (MPEG) formatted stream for internal transfer and manipulation and are parsed and separated it [sic] into video and audio components. The components are stored in temporary buffers. Events are recorded that indicate the type of component that has been found, where it is located, and when it occurred. The program logic is notified that an event has occurred and the data is extracted from the buffers. The parser and event buffer decouple the CPU from having to parse the MPEG stream and from the real time nature of the data streams which allows for slower CPU and bus speeds and translate to lower system costs. The video and audio components are stored on a storage device and when the program is requested for display, the video and audio components are extracted from the storage device and reassembled into an MPEG stream which is sent to a decoder. The decoder converts the MPEG stream into TV output signals and delivers the TV output signals to a TV receiver. User control commands are accepted and sent through the system. These commands affect the flow of said MPEG stream and allow the user to view stored programs with at least the following functions: reverse, fast forward, play, pause, index, fast/slow reverse play, and fast/slow play.

The claims at issue for claim construction include Claims 31 and 61 of the '389 Patent.

Claim 31 of the '389 Patent recites:

31. A process for the simultaneous storage and play back of multimedia data, comprising the steps of:
providing a physical data source, wherein said physical data source accepts broadcast data from an input device, parses video and audio data from said broadcast data, and temporarily stores said video and audio data;

providing a source object, wherein said source object extracts video and audio data from said physical data source;

providing a transform object, wherein said transform object stores and retrieves data streams onto a storage device;

wherein said source object obtains a buffer from said transform object, said source object converts video data into data streams and fills said buffer with said streams;

wherein said source object is automatically flow controlled by said transform object;

providing a sink object, wherein said sink object obtains data stream buffers from said transform object and outputs said streams to a video and audio decoder;

wherein said decoder converts said streams into display signals and sends said signals to a display;

wherein said sink object is automatically flow controlled by said transform object;

providing a control object, wherein said control object receives commands from a user, said commands control the flow of the broadcast data through the system; and

wherein said control object sends flow command events to said source, transform, and sink objects.

Claim 61 of the '389 Patent recites:

61. An apparatus for the simultaneous storage and play back of multimedia data, comprising:

a physical data source, wherein said physical data source accepts broadcast data from an input device, parses video and audio data from said broadcast data, and temporarily stores said video and audio data;

a source object, wherein said source object extracts video and audio data from said physical data source;

a transform object, wherein said transform object stores and retrieves data streams onto a storage device;

wherein said source object obtains a buffer from said transform object, said source object converts video data into data streams and fills said buffer with said streams;

wherein said source object is automatically flow controlled by said transform object;

a sink object, wherein said sink object obtains data stream buffers from said transform object and outputs said streams to a video and audio decoder;

wherein said decoder converts said streams into display signals and sends said signals to a display;

wherein said sink object is automatically flow controlled by said transform object;

a control object, wherein said control object receives commands from a user, said

commands control the flow of the broadcast data through the system; and wherein said control object sends flow command events to said source, transform, and sink objects.

The parties have submitted the following disputed terms for the '389 Patent : (1) “physical data source accepts broadcast data”; (2) “parses”; (3) “objects” and “source object”; (4) “transform object”; (5) “buffer,” “obtains a buffer,” and “obtains data stream buffers”; (6) “automatically flow controlled”; (7) “sink object”; and (8) “control object.” See Dkt. No. 183 at Exh. A. Certain claim terms in the '389 Patent were previously construed by this Court in *Tivo Inc. v. Echostar Communications Corp.*, Civ. Act. No. 2:04-cv-1, Dkt. No. 185 (hereinafter “*Echostar* CC Order”).

1. “Physical Data Source accepts broadcast data”

a. Parties’ Proposed Constructions

Plaintiff believes that no construction is necessary for this term. Dkt. No. 148 at 16. Alternatively, Plaintiff proposes that “physical data source” be construed to mean “hardware and software that accepts broadcast data, parses video and audio data from aid broadcast data, and temporarily stores video and audio data.” Plaintiff argues that functionality within the physical data source can be implemented in software and not solely in hardware. *Id.* According to Plaintiff, limiting the physical data source to hardware acting without software would improperly exclude the preferred embodiment. *Id.* at 17.

Defendants disagree with Plaintiff and argues that “the claims state what the physical data source must do, but not what the physical data source is.” Dkt. No. 151 at 15 (emphasis removed). Defendants argue that the patent specification discloses the “physical data source” as hardware separate from the CPU and that it is this separation that “lies at the heart of the stated

invention.” *Id.* Defendants further state that Plaintiff’s proposed construction forecloses a hardware-only implementation of the physical data source. *Id.* at 16.

Plaintiff replies that Defendants’ proposed construction improperly imports limitations from one preferred embodiment. Dkt. No. 157 at 8. Defendants sur-reply that “physical data source” does not have a conventional meaning and a person of skill in the art would have to resort to the specification to determine what the phrase means. Dkt. No. 162 at 8.

Plaintiff also proposes, in the alternative, that “accepts broadcast data” be construed to mean “accepts data that was transmitted.” Dkt. No. 148 at 18. Plaintiff argues that Defendants’ proposed construction improperly adds new claim limitations. *Id.* Defendants identify the conflict between the parties as whether “broadcast data” can cover data that is sent to only a particular user or a particular subset of users. Dkt. No. 151 at 8. According to Defendants, the ordinary meaning of “broadcast” is “sending data indiscriminately, such that no user needs to request it.” *Id.* Defendants argue that “broadcast” is not just a transmission, as argued by Plaintiff, but is a transmission that goes to all users. *Id.* at 10. Furthermore, Defendants argue that if “accepts broadcast data” is construed as proposed by Plaintiff, the term “broadcast” would be superfluous, and the claims could read “accepts data.” *Id.* at 11.

b. Discussion

The patent specification states that “[t]he source object 901 takes data out of a physical data source, such as the Media Switch, and places it into a PES buffer.” Because the “Media Switch” is separate from the CPU in Figure 9, Defendants argue that the physical data source must also be separate from the CPU. However, it is clear from the specification that the “Media Switch” was being used as an example of a “physical data source.” Furthermore, this Court has

previously held that the physical data source is not limited to the Media Switch. *Tivo Inc. v. Dish Network Corp.*, 640 F.Supp. 2d 853, 868 (E.D. Tex. 2009). Specifically, this Court held that “the physical data source of the Software Claims [claims 31 and 61] need only parse.” *Id.*

Accordingly, it would be improper to limit the physical data source to hardware that is separate from the CPU when the specification does not itself make that distinction. The Court therefore construes “physical data source” to mean “hardware and software that parses video and audio data from aid broadcast data.”

With respect to the term “accepts broadcast data,” Defendants’ proposed construction improperly adds limitations that are not contemplated by the specification or claims. There is no disclosure that the patentee intended to limit “broadcast data” only to data that is transmitted to all users. The Court therefore construes “accepts broadcast data” to mean “accepts data that was transmitted.”

2. “Parses video and audio data from said broadcast data, and temporarily stores said video and audio data”

a. Parties’ Proposed Constructions

“Parses” appears in Claims 31 and 61 of the ’389 Patent. Plaintiff proposes that the Court adopt its existing construction and continue to construe the term “parse” to mean “analyze,” “parses video and audio data from said broadcast data” should be construed to mean “analyzes video and audio data from the broadcast data,” and the “physical data source . . . parses video and audio data from said broadcast data, and temporarily stores said video and audio data” requires no further construction. Dkt. No. 148 at 9. Plaintiff argues that Defendants’ proposed constructions reargues positions that the Court has previously rejected. *Id.* at 10.

Defendants propose that “parses” should be construed to mean “breaks down,” “parses video and audio data from said broadcast data” should be construed to mean physical data source breaks down the broadcast data to identify the video data components and the audio data components,” and “physical data source . . . parses video and audio data from said broadcast data, and temporarily stores said video and audio data” should be construed to mean “physical data source breaks down the broadcast data to identify and separately store the video data components and the audio data components.” Dkt. No. 151 at 11. Defendants argue that “based on the way U-verse IPTV boxes acquire and process programs, substituting ‘analyzes’ for ‘parses’ would leave a fundamental dispute about claim scope.” Dkt. No. 151 at 12. Defendants argue that the Court should construe “parse” as “break down and separate” in accordance with the ordinary meaning of “parse.” *Id.* Defendants state that their proposed construction does not make the “is separated” language in claim 1 superfluous.

b. Discussion

The Court previously considered “parse” during the *Echostar* litigation and construed the term to mean “analyze.” *Echostar* CC Order at 18. Defendants argue that the Court’s prior construction would leave a fundamental dispute about claim scope but have not disclosed or explained the nature of this dispute. Accordingly, the Court is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of “parse” to mean “analyze.” Similarly, the Court adopts its prior construction and construes “parses video and audio data from said broadcast data” to mean “analyzes video and audio data from the broadcast data.” Finally, the Court finds that “physical data source . . . parses video and audio data from said broadcast data, and temporarily stores said video and audio data” does not need

further construction in light of the Court's construction of the terms "parse" and "parses video and audio data from said broadcast data."

3. "Object," "source object," and "wherein said source object extracts video and audio data from said physical data source"

a. Parties' Proposed Constructions

Plaintiff proposes that the Court adopt its existing construction and continue to construe the term "object" to mean "a collection of data and operations" and to have this construction be applied to "control object," and "source object." Dkt. No. 148 at 11. Plaintiff points out that the Federal Circuit affirmed the court's constructions in the EchoStar appeal. *Id.* Plaintiff argues that Defendants' proposed construction is not found in the intrinsic evidence, and has no meaning the context of the claims. *Id.*

Defendants argue that Plaintiff narrowed and clarified the meaning of "object" during reexamination. Dkt. No. 151 at 14. Defendants state that their proposed construction is based on Plaintiff's representations during reexamination. Defendants also argue that their proposed construction applies equally to object-oriented and non-object-oriented programming languages.

Plaintiff replies that it did not narrow the scope of the term "object" during reexamination but did explain certain ordinary meanings for the words "collection," "data," and "operations" that appear in the Court's prior construction. Plaintiff argues that Defendants' proposed construction is merely construing terms contained in the Court's construction when the jury in *EchoStar* had no problems applying the Court's construction without further explanation. Dkt. No. 157 at 5.

b. Discussion

The Court previously considered “object,” and “source object” during the *Echostar* litigation and construed “object” to mean “a collection of data and operations” and applied this construction to “control object,” and “source object.” *Echostar* CC Order at 24-26 and 28-29. The Court does not find that Plaintiff narrowed the scope of the term “object” during reexamination and is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of “object” to mean “a collection of data and operations.” The Court further construes “source object” to mean “a collection of data and operations that (1) extracts video and audio data from a physical data source, (2) obtains a buffer from a transform object, (3) converts video data into data streams, and (4) fills the buffer with the streams.” Finally, in light of the Court’s prior construction of the terms “source object” and “physical data source,” no further construction is required for “wherein said source object extracts video and audio data from said physical data source.”

4. “Transform object” and “wherein said transform object stores and retrieves data streams onto a storage device”

a. Parties’ Proposed Constructions

Plaintiff proposes that the Court adopt its existing construction and continue to construe the term “transform object” to mean “a collection of data and operations that transforms the form of data upon which it operates.” Plaintiff also proposes that the Court apply its existing construction of “transform object” to “wherein said transform object stores and retrieves data streams onto a storage device.” Dkt. No. 148 at 20. Plaintiff argues that Defendants’ proposed construction for “wherein said transform object stores and retrieves data streams onto a storage device” include elements not referred to in the claims in general. *Id.*

Defendants propose that “wherein said transform object stores and retrieves data streams onto a storage device” be construed to mean “the centralized transform object writes data streams from the input side onto a storage device and reads data streams from the storage device for the output side.” Dkt. No. 151 at 19. Defendants argue that their proposed construction “recites the ordinary meaning that [Plaintiff] told the USPTO the claim language would convey to a person of skill” and “removes potential confusion arising from the awkward phrasing of” “stores and retrieves data streams onto a storage device.” *Id.*

Defendants further argue that Plaintiff “redefined the terms ‘transform object’ and ‘automatic flow control’ in its statements to the USPTO during reexamination last Fall.” Dkt. No. 151 at 3. Defendants argue that Plaintiff told the USPTO during reexamination that the “self-regulated” definition of “automatically flow controlled” did not apply. Rather, Plaintiff’s expert stated during reexamination how a person of ordinary skill in the art would view the transform object, thereby redefining it, according to Defendants. *Id.* at 4. *Id.*

b. Discussion

The Court previously considered “transform object” during the *Echostar* litigation and is not persuaded that its previous construction should be changed. *Echostar* CC Order at 26-27. The Court therefore adopts its prior construction of “transform object” to mean “a collection of data and operations that transforms the form of data upon which it operates.” The Court, however, agrees with Defendants that “stores and retrieves data streams onto a storage device” may be confusing. The Court thus will construe “wherein said transform object stores and retrieves data streams onto a storage device” to mean “wherein said transform object stores data streams onto a storage device and retrieves data streams from the storage device.”

5. ***“Buffer,” “obtains a buffer,” “obtains data stream buffers,” and “said source object is automatically flow controlled by said transform object”***

a. Parties’ Proposed Constructions

Plaintiff proposes that the Court adopt its existing construction and continue to construe the term “buffer” to mean “memory where data can be temporarily stored for transfer” and to have this construction be applied to “obtains a buffer” and “obtains data stream buffers.” Dkt. No. 148 at 12. Plaintiff points out that the Federal Circuit affirmed the court’s constructions in the EchoStar appeal. *Id.* Plaintiff argues that Defendants’ proposed construction seeks to added the word “reserved” when it does not appear in the claims or specification. *Id.* at 13.

Defendants respond that Plaintiff cannot “credibly dispute that a memory location must be set aside or reserved for it to serve as a buffer. Otherwise, all hardware capable of holding data would be a buffer.” Dkt. No. 151 at 17. Defendants propose that “buffer” be construed to mean “reserved memory where data can be temporarily stored for transfer.” *Id.* Defendants dispute that the Federal Circuit approved the Court’s prior construction of the term “buffer.” According to Defendants, the Federal Circuit only addressed the term “object” and did not address the construction of “buffer.” *Id.* Defendants also argue that “obtains a buffer” should be construed to mean “requests and receives a buffer” because the ordinary meaning of “obtain” is “to succeed in gaining possession of as the result of planning or endeavor.” *Id.* at 19-20.

Finally, Defendants submit that “said source object converts video data into data streams and fills said buffer” should be construed to mean “the source object converts the video data components it has removed from the physical data source into.” Dkt. No. 151 at 17. Defendants argue that this construction is necessary to explain to the jury that the video data the source

object converts into streams is the video data the source object removed from the physical data source. *Id.* at 19.

Plaintiff replies Defendants' proposed construction of "wherein said source object extracts . . ." requires the source object to remove video and audio data from the physical data source, which is a limitation not required by the patent. Dkt. No. 157 at 9. Plaintiff urges that its proposed construction is consistent with the ordinary meaning of "extracts." *Id.*

b. Discussion

The Court previously considered "buffer," "obtains a buffer," and "obtains data stream buffers" during the *Echostar* litigation and construed "buffer" to mean "memory where data can be temporarily stored for transfer." *Echostar* CC Order at 22-24. This Court applied this construction to "obtains a buffer" and "obtains data stream buffers." The Court is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of "buffer" to mean "memory where data can be temporarily stored for transfer." Because of the Court's prior construction of "source object" and "buffer," the Court finds that the phrase "said source object is automatically flow controlled by said transform object" needs no further construction.

6. "Automatically flow controlled" and "wherein said source object is automatically flow controlled by said transform object"

a. Parties' Proposed Constructions

Plaintiff proposes that "automatically flow controlled" continue to be construed as "self-regulated." Dkt. No. 148 at 13. Plaintiff states that "[t]hese constructions followed from the 'clear definition in the specification'" *Id.* Plaintiff argues that, contrary to Defendants'

arguments, Plaintiff's explanations to the Patent Office during reexamination did not disavow any claim scope or re-define any claim terms. *Id.* at 14.

Defendants responds that Plaintiff "redefined the terms 'transform object' and 'automatic flow control' in its statements to the USPTO during reexamination last Fall." Dkt. No. 151 at 3. Defendants argue that Plaintiff told the USPTO during reexamination that the "self-regulated" definition of "automatically flow controlled" did not apply. Rather, Plaintiff's expert stated during reexamination how a person of ordinary skill in the art would view the transform object, thereby redefining it, according to Defendants. *Id.* at 4. *Id.*

b. Discussion

The Court previously considered "automatically flow controlled" during the *Echostar* litigation and construed "automatically flow controlled" to mean "self-regulated." *Echostar* CC Order at 24. The Court does not find that Plaintiff redefined "transform object" and "automatic flow control" during reexamination and is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of "buffer" to mean "memory where data can be temporarily stored for transfer."

7. "Sink object" and "wherein said sink object obtains data stream buffers from said transform object and outputs said streams to a video and audio decoder"

a. Parties' Proposed Constructions

Plaintiff proposes that the Court adopt its existing construction and continue to construe the term "sink object" to mean "a collection of data and operations that (1) obtains data stream buffers from a transform object and (2) outputs the streams to a video and audio decoder."

Plaintiff also submits that "wherein said sink object obtains data stream buffers from said

transform object and outputs said streams to a video and audio decoder” does not need further construction in light of the Court’s previous constructions of “sink object,” “buffers,” and “transform object.” Dkt. No. 148 at 11. Plaintiff points out that the Federal Circuit affirmed the Court’s constructions in the EchoStar appeal. *Id.* Plaintiff argues that Defendants’ proposed construction is not found in the intrinsic evidence. *Id.*

Defendants argue that Plaintiff narrowed and clarified the meaning of “object” during reexamination. Dkt. No. 151 at 14. Defendants state that their proposed construction is based on Plaintiff’s representations during reexamination. Defendants also argue that their proposed construction applies equally to object-oriented and non-object-oriented programming languages.

Plaintiff replies that it did not narrow the scope of the term “object” during reexamination but did explain certain ordinary meanings for the words “collection,” “data,” and “operations” that appear in the Court’s prior construction. Plaintiff argues that Defendants’ proposed construction is merely construing terms contained in the Court’s construction when the jury in *EchoStar* had no problems applying the Court’s construction without further explanation. Dkt. No. 157 at 5.

b. Discussion

The Court previously considered “sink object” during the *Echostar* litigation and construed “sink object” to mean “a collection of data and operations that (1) obtains data stream buffers from a transform object and (2) outputs the streams to a video and audio decoder.” *Echostar* CC Order at 27-28. The Court is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of “sink object” to mean “a collection of data and operations that (1) obtains data stream buffers from a transform object and (2)

outputs the streams to a video and audio decoder.”

In light of the Court’s prior construction of the terms “sink object,” “buffers,” and “transform object,” no further construction is required for “wherein said sink object obtains data stream buffers from said transform object and outputs said streams to a video and audio decoder.”

8. *“Control object” and “wherein said control object sends flow command events to said source, transform, and sink objects”*

a. Parties’ Proposed Constructions

Plaintiff proposes that the Court adopt its existing construction and continue to construe the term “control object” to mean “a collection of data and operations that receives commands from a user that control the flow of broadcast data” Dkt. No. 148 at 10. Plaintiff also submits that “wherein said control object sends flow command events to said source, transform, and sink objects” does not need further construction in light of the Court’s previous constructions of “source object,” “transform object,” and “sink object.” Dkt. No. 148 at 21. Plaintiff points out that the Federal Circuit affirmed the Court’s constructions in the EchoStar appeal. *Id.* Plaintiff argues that Defendants’ proposed construction is not found in the intrinsic evidence. *Id.*

Defendants argue that Plaintiff narrowed and clarified the meaning of “object” during reexamination. Dkt. No. 151 at 14. Defendants state that their proposed construction is based on Plaintiff’s representations during reexamination. Defendants also argue that their proposed construction applies equally to object-oriented and non-object-oriented programming languages.

Plaintiff replies that it did not narrow the scope of the term “object” during reexamination but did explain certain ordinary meanings for the words “collection,” “data,” and “operations”

that appear in the Court's prior construction. Plaintiff argues that Defendants' proposed construction is merely construing terms contained in the Court's construction when the jury in *EchoStar* had no problems applying the Court's construction without further explanation. Dkt. No. 157 at 5.

b. Discussion

The Court previously considered "control object" during the *Echostar* litigation and construed "control object" to mean "a collection of data and operations that receives commands from a user that control the flow of broadcast data." *Echostar* CC Order at 28-29. The Court is not persuaded that its previous construction should be changed. The Court therefore adopts its prior construction of "control object" to mean "a collection of data and operations that receives commands from a user that control the flow of broadcast data."

In light of the Court's prior construction of the terms "control object," "source object," "transform object," and "sink object," no further construction is required for wherein said control object sends flow command events to said source, transform, and sink objects."

IV. U.S. Patent No. 7,493,015

Tivo has asserted claims 3, 15, and 19 of the '015 Patent against Defendants. The abstract for the '015 Patent states:

An automatic playback overshoot correction system predicts the position in the program material where the user expects to be when the user stops the fast forward or reverse progression of the program material. The system determines the position where the program material was stopped and transitions to the new mode that the user selected, starting at the stopped position with an overshoot correction factor added or subtracted from it. The system uses a prediction method to correctly place the user within the program upon transition out of fast forward or reverse mode and determines if [sic] the speed of the fast forward or reverse modes and then automatically subtracts or adds, respectively, a time multiple to

the frame where the transition was detected and positions the user at the correct frame. The time multiple is fine tuned if the user is consistently correcting after the fast forward or rewind mode stops.

Independent claim 1, from which claim 3 depends, recites:

1. A method, comprising:
 receiving a first user command; playing audio or video program material to a user based on the first user command;
 fast forwarding or reversing through the program material based on a second user command;
 terminating fast forward or reverse progression through the program material based on a third user command;
 detecting current position in the program material where the termination occurred;
 calculating a new position in the program material to compensate for a difference between the current position and the user's expected termination point in the program material by adding a positional offset to the current position when reverse mode has been terminated or subtracting a positional offset from the current position when fast forward mode has been terminated; and
 playing the program material starting at the new position based on the third user command.

Independent claim 13, from which claim 15 depends, recites:

13. An apparatus for automatically correcting the playback position within an audio or video program's material after a user terminates a fast forward or reverse progression through the program material, comprising:
 a module for receiving a user command;
 a module for terminating fast forward or reverse progression through the program material based on the user's command;
 a module for detecting current position in the program material where the termination occurred;
 an overshoot correction module for calculating a new position in the program material to compensate for a difference between the current position and the user's expected termination point in the program material by adding a positional offset to the current position when reverse mode has been terminated or subtracting a positional offset from the current position when fast forward mode has been terminated; and
 a module for playing the program material starting at the new position.

Independent claim 17, from which claim 19 depends, recites:

17. A computer-readable medium carrying one or more sequences of instructions, which instructions, when executed by one or more processors, cause the one or more processors to perform a method comprising:

receiving a first user command; playing audio or video program material to a user based on the first user command;

fast forwarding or reversing through the program material based on a second user command;

terminating fast forward or reverse progression through the program material based on a third user command;

detecting current position in the program material where the termination occurred;

calculating a new position in the program material to compensate for a difference between the current position and the user's expected termination point in the program material by adding a positional offset to the current position when reverse mode has been terminated or subtracting a positional offset from the current position when fast forward mode has been terminated; and

playing the program material starting at the new position based on the third user command.

The parties have submitted the following disputed terms for the '015 Patent : (1) “to compensate for a difference . . .”; (2) “adding” and “subtracting” a “positional offset”; and (3) “module”. See Dkt. No. 163 at Exh. A.

1. “To compensate for a difference between the current position and the user’s expected termination point in the program material”

a. Parties’ Proposed Constructions

Plaintiff submits that this term does not require construction. In the alternative, Plaintiff proposes that the term be construed to mean “calculating a new position in the program material to make up for a difference between the current position and the user’s expected termination point in the program material.” Dkt. No. 148 at 22. Plaintiff argues that this phrase is readily understood from the context of its use in the claims and should be construed in accordance with

the ordinary meaning of “compensate.” *Id.* Plaintiff further argues that Defendants’ proposed construction limits the phrase to one of several overshoot correction embodiments disclosed in the specification. *Id.* Plaintiff points out that the patent specification actually discloses compensation methods that are not necessarily based on the user’s past corrections, as is required by the Defendants’ proposed construction. *Id.*

Defendants submit that this term is indefinite, unless construed to mean “adaptively, on a user-by-user basis, based on the user’s past corrections for a difference between the current position and where the user expected to be after stopping the fast forward or reverse modes.” Dkt. No. 151 at 22-23. Specifically, Defendants submit that the term “user’s expected termination point” is ambiguous. *Id.* at 23. Defendants argue that “[a]n artisan would be unable to determine whether a system infringes the asserted claims without knowing every possible user’s expectation.” *Id.* at 23-24. Defendants further argue that Plaintiff had disclaimed resuming playback at the point when the user pressed a button to end the function, and thus, disclaimed the only objective measure the claim term provides. *Id.* Defendants argue that their proposed construction is a narrowing construction that gives the claim a defined scope while Plaintiff’s proposed construction is still indefinite because it includes the ambiguous term. *Id.* at 25.

Plaintiff replies that the claims do not require detecting a user’s expectations. Dkt. No. 157 at 9. Plaintiff argues that “user’s expected termination point” is not indefinite because Defendants have submitted that it should be construed to mean “where the user expected to be after stopping on the fast forward or reverse modes.” *Id.* Plaintiff further argues that claims 1 and 13 do not require that any particular user’s expectation be determined, detected, or

calculated. Rather, the claims are directed towards techniques for compensating for a difference between the current position and the user's expected termination point. *Id.* Defendants sur-reply that a system cannot compensate for a difference based on a user's expectation without first knowing where that point is. Dkt. No. 162 at 9.

b. Discussion

A claim is invalid for indefiniteness if it fails to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. 35 U.S.C. § 112, ¶ 2. To prevail on an indefiniteness argument, the party seeking to invalidate a claim must prove "by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area." *Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1249–50 (Fed. Cir.2008). The primary purpose of the definiteness requirement is to ensure public notice of the scope of the patentee's legal right to exclude, such that interested members of the public can determine whether or not they infringe. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir.2005); *Halliburton*, 514 F.3d at 1249; *Honeywell Int'l Inc. v. Int'l Trade Comm'n*, 341 F.3d 1332, 1338 (Fed. Cir.2003). Courts apply the general principles of claim construction in their efforts to construe allegedly indefinite claim terms. *Datamize*, 417 F.3d at 1348; *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1346 (Fed. Cir.2007). A claim is indefinite only when a person of ordinary skill in the art is unable to understand the bounds of the claim when read in light of the specification. *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875 (Fed. Cir.1993); *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir.2008). A determination of claim indefiniteness is a conclusion of law. *Exxon Research &*

Eng'g Co. v. United States, 265 F.3d 1371, 1375–76 (Fed. Cir.2001); *Datamize*, 417 F.3d at 1347.

A claim is indefinite only if the claim is “insolubly ambiguous” or “not amenable to construction.” *Exxon*, 265 F.3d at 1375; *Halliburton*, 514 F.3d at 1249; *Honeywell*, 341 F.3d at 1338–39. A court may find a claim indefinite “only if reasonable efforts at claim construction prove futile.” *Datamize*, 417 F.3d at 1347. A claim term is not indefinite solely because the term presents a difficult claim construction issue. *Id.*; *Exxon*, 265 F.3d at 1375; *Honeywell*, 341 F.3d at 1338. “If the meaning of the claim is discernable, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, ... the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds.” *Exxon*, 265 F.3d at 1375; *Halliburton*, 514 F.3d at 1249.

Defendants argue that “user’s expected termination point” is ambiguous, stating that this limitation requires one who wishes to practice the claimed invention to know every possible user’s expectations. However, a fair reading of the patent specification would indicate that this is not the case.

The specification states that “the invention predicts the position (overshoot correction) in the program material where the user expects to be when the user stops the fast forward or reverse modes.” ’015 Patent, 20:19-22. The specification then states that the frame start position after fast forwarding or reversing is “the present frame with an overshoot correction factor added or subtracted from it.” *Id.* at 20:40-42. The specification goes on to describe the various ways to calculate an overshoot correction factor for a user and adapting that overshoot correction factor to the user. *Id.* at 20:43-21:5. The specification discloses several ways of adapting the overshoot

correction factor to the user, including basing the overshoot correction factor on the user's corrections to the frame start position, on the user's reaction time as gauged by a test video, or on a sensitivity setting set by the user. *Id.* Nowhere does the specification discuss using an actual user's real expectation to perform an overshoot correction. Rather, the specification discusses the invention predicting what a user's expectation will be and adapting that prediction to a user using one of the adaptive methods discussed above.

Accordingly, one of ordinary skill would read the specification and claims and understand that "user's expected termination point" as used in claims 1, 13, and 17, to mean "the position in the program material where the user expects to be when the user stops the fast forward or reverse modes, as predicted by the claimed invention." Thus, the Court finds that "to compensate for a difference between the current position and the user's expected termination point in the program material" is not indefinite and the Court construes this term to mean "calculating a new position in the program material to make up for a difference between the current position and the position in the program material where the user expects to be when the user stops the fast forward or reverse modes, as predicted by the claimed invention, in the program material."

2. *"Adding a positional offset to the current position when reverse mode has been terminated or subtracting a positional offset from the current position when fast forward mode has been terminated"*

a. Parties' Proposed Constructions

Plaintiff submits that no construction is necessary. Plaintiff proposes, in the alternative, that the term be construed to mean "adding a value to the current position to compensate for the difference in position when reverse mode has been terminated or subtracting a value from the current position to compensate for the difference in position when fast forward mode has been

terminated.” Dkt. No. 148 at 23. Plaintiff argues that this term is readily understood based on the claim language in context. *Id.*

Defendants propose construing the term to mean “adjusting the current position in the program material by moving the position forward if the third command stopped reverse playback mode and moving the position backward if the third command stopped fast forward playback mode.” Defendants argue that their proposed construction correctly explains that the claim covers a system that can correct for overshoot for both reversing and fast-forwarding, whereas Plaintiff’s proposed construction would only require the system to be capable of correcting for overshoot in one direction. Dkt. No. 151 at 26. Plaintiff replies that Defendants’ proposed construction seeks to replace “or” with “and” in the calculating phrase. Dkt. No. 157 at 12.

b. Discussion

The parties’ main dispute regarding this term lies in whether the “or” in “adding a positional offset . . . or subtracting a positional offset” means “and.” Defendants argue that the “or” in the calculating step should be construed to mean “and.” However, the other elements of claims 1 and 13 are all claimed in terms of “fast forwarding or reversing.” Therefore, the “calculating” element of claims 1 and 13 corresponds to “fast forwarding or reversing” and substituting “and” for “or” in the “calculating” element would be inappropriate. Furthermore, Defendants argue that Plaintiff has claimed a device that can only implement overshoot correction in one direction in a currently pending patent application, which means that this patent cannot claim that device. However, that pending application has not issued and the scope and language of its claims are still subject to change. While Defendants have presented authority for the proposition that a later patent is prohibited from covering the same invention as an earlier

patent, Defendants have not presented any authority supporting the proposition that pending patent applications are relevant to the present inquiry. *See Sun Pharm. Indus., Ltd. v. Eli Lilly*, 611 F.3d 1381, 1384-1385 (Fed. Cir. 2010).

Accordingly, the Court construes this term to mean “adding a value to the current position to compensate for the difference in position when reverse mode has been terminated or subtracting a value from the current position to compensate for the difference in position when fast forward mode has been terminated.”

3. “Module”

a. Parties’ Proposed Constructions

Plaintiff submits that no construction is necessary for this term. In the alternative, Plaintiff proposes that “module” be construed to mean “a portion of a device and/or a software program that carries out a specific function and may be used alone or combined with other modules of the same device or program.” Dkt. No. 148 at 24. Plaintiff argues that the term module should not be construed in the abstract. *Id.* Plaintiff states that in the context of the claims, none of the recited modules are used alone but are combined with other modules. *Id.* Plaintiff also points out that nothing in the patents require that the module operate as a standalone unit.

Defendants propose that “module” should be construed to mean “separate, standalone software unit that can function on its own” Dkt. No. 151 at 28. Defendants argue that the patent specification uses the term module to refer to separate standalone software units that can function on their own. *Id.*

b. Discussion

The parties dispute whether a module is able to function on its own. Defendants argue that it is accepted in the art that modules can function on their own. However, as Plaintiff has pointed out, the claims and specification do not require that each of the claimed modules be able to function on its own. The Court therefore construes “module” to mean “a portion of a device and/or a software program that carries out a specific function and may be used alone or combined with other modules of the same device or program.”

V. U.S. Patent No. 7,529,465

Tivo has asserted claims 1, 4, 8, 10, and 13 of the '465 Patent against Defendants.

The Abstract for the '465 Patent states:

A multimedia time warping system. The TV streams are converted to an Moving Pictures Experts Group (MPEG) formatted stream for internal transfer and manipulation and are parsed and separated it into video and audio components. The components are stored in temporary buffers. Events are recorded that indicate the type of component that has been found, where it is located, and when it occurred. The program logic is notified that an event has occurred and the data is extracted from the buffers. The parser and event buffer decouple the CPU from having to parse the MPEG stream and from the real time nature of the data streams which allows for slower CPU and bus speeds and translate to lower system costs. The video and audio components are stored on a storage device and when the program is requested for display, the video and audio components are extracted from the storage device and reassembled into an MPEG stream which is sent to a decoder. The decoder converts the MPEG stream into TV output signals and delivers the TV output signals to a TV receiver.

Claim 1 of the '465 Patent recites:

1. A process for a digital video recorder, comprising the steps of:
storing a plurality of multimedia programs in digital form on at least one storage device; wherein a user selects previously recorded multimedia program(s) from said at least one storage device;
simultaneously retrieving for play back a video segment from at least one of said selected previously recorded multimedia program(s) and a video segment from a multimedia program whose storage is in progress using video segment

identifying information generated by the digital video recorder for at least one video segment in said at least one of said selected previously recorded multimedia program(s) and video segment identifying information generated by the digital video recorder for at least one video segment in said multimedia program whose storage is in progress to cause delivery of selected video segments to an output subsystem, the digital video recorder automatically generating video segment identifying information for specific video segments in multimedia programs as each multimedia program is being stored on said at least one storage device; and wherein said simultaneously retrieving for play back step allows playback rate and direction of each multimedia program to be controlled individually and simultaneously to perform any of: fast forward, rewind, frame step, pause, and play functions.

Claim 10 of the '465 Patent recites:

10. An apparatus for a digital video recorder, comprising:

a module for storing a plurality of multimedia programs in digital form on at least one storage device; wherein a user selects previously recorded multimedia program(s) from said at least one storage device;

a module for simultaneously retrieving for play back a video segment from at least one of said selected previously recorded multimedia program(s) and a video segment from a multimedia program whose storage is in progress using video segment identifying information generated by the digital video recorder for at least one video segment in said at least one of said selected previously recorded multimedia program(s) and video segment identifying information generated by the digital video recorder for at least one video segment in said multimedia program whose storage is in progress to cause delivery of selected video segments to an output subsystem, the digital video recorder automatically generating video segment identifying information for specific video segments in multimedia programs as each multimedia program is being stored on said at least one storage device; and

wherein said simultaneously retrieving for play back module allows playback rate and direction of each multimedia program to be controlled individually and simultaneously to perform any of: fast forward, rewind, frame step, pause, and play functions.

The parties have submitted the following disputed terms for the '465 Patent : (1) “digital video recorder”; (2) “video segment” and “video segment identifying information”; (3) “an output system”; (4) “allows . . . to be controlled,” “individually,” and “any of”; (5) “module”; (6) “remote control”; and (7) “input signal tuners” and “and/or.” See Dkt. No. 163 at Exh. A.

1. “Digital video recorder”

a. Parties’ Proposed Constructions

Plaintiff believes that “digital video recorder” should be construed to mean “a device that allows the user to store multimedia programs in digital form.” Dkt. No. 26. Plaintiff argues that this proposed construction “flows directly from the use of the term in asserted claims 1 and 10.” Dkt. No. 148 at 26. Plaintiff argues that an object of the claimed invention is for the digital video recorder to allow a user to store or record, and simultaneously playback, multimedia programs. *Id.*

Defendants submit that “digital video recorder” should be construed to mean “a device capable of recording digital video.” Dkt. No. 151 at 35. Defendants argue that Plaintiff’s proposed construction improperly adds a new “user” limitation. *Id.*

b. Discussion

Plaintiff proposes that “digital video recorder” be construed to mean “a device that allows the user to store multimedia programs in digital form.” However, Plaintiff’s proposed construction adds a “user” limitation with respect to storing multimedia programs that was not previously present in claims 1 and 10. Accordingly, the Court construes the term to mean “a device capable of recording multimedia programs in digital form.”

2. “video segment” and “video segment identifying information”

a. Parties’ Proposed Constructions

Plaintiff believes that no construction of “video segment” is necessary. In the alternative, Plaintiff proposes construing “video segment” as “a portion of video from a multimedia program.” Dkt. No. 148. Similarly, Plaintiff also believes that “video segment identifying

information” does not need to be construed, but provides a proposed construction of “information that identifies a portion of video from a multimedia program” as an alternative. *Id.* Plaintiff submits that “[n]othing in the intrinsic evidence limits the ordinary meaning of ‘segment,’” and argues that Defendants’ proposed constructions add new limitations to the claims. *Id.*

Defendants propose that “video segment” be construed to mean “two or more video frames within a multimedia program.” Dkt. No. 151 at 33. Defendants also propose that “video segment identifying information” be construed to mean “data that identifies the start of a video segment.” *Id.* Defendants argue that Plaintiff’s construction could apply to a single frame, which, according to Defendants, is an image and not video. Defendants argue that their proposed construction for “video segment” gives the term its broadest possible meaning. *Id.* Defendants further argue that Plaintiff’s proposed construction for “video segment identifying information” ignores language in the patent that states “[t]he parser parses the stream looking for MPEG distinguished events indicating the start of video, audio or private data segments.” ’465 Patent, 12:20-23.

b. Discussion

The parties dispute whether a “video segment” should be limited to only portions of a multimedia program or if it can include the entire multimedia program. The patent specification does not exclude retrieving the entire multimedia program, and actually discloses playing back the entire recorded program. Defendants argue that Plaintiff’s proposed construction could also include a single frame of video, which, according to Defendants, would be an image and not video. However, Defendants do not present any authority for this argument. Defendants also do not point to any portion of the specification that states that a video segment must include more

than one frame or that the invention cannot play back one frame only. Accordingly, the Court hereby construes “video segment” as “a portion of video from a multimedia program” and “video segment identifying information” as “information that identifies a portion of video from a multimedia program.”

3. “An output subsystem”

a. Parties’ Proposed Constructions

Plaintiff submits that “an output subsystem” does not need construction, but proposes, in the alternative, that it be construed to mean “a subsystem in the digital video recorder, wherein the subsystem produces output signals.” Dkt. No. 148 at 27. Plaintiff argues that the claims do not require that “subsystem” be implemented only in “hardware” or that the output subsystem be capable of simultaneously producing display signals *Id.* at 28.

Defendants submit that the term should be construed to mean “a hardware subsystem capable of simultaneously producing display signals for the stored program and the program whose storage is in progress.” Dkt. No. 151 at 34. Defendants argue that a system cannot output signals for play back unless it can display them and point out that Figures 1 and 13 show that the output module sends outputs to “TV” or “VCR.” *Id.*

b. Discussion

Defendants’ proposed construction adds limitations that are not present in the claims: (1) limiting the subsystem to hardware only and excluding any software limitations; and (2) requiring the subsystem to simultaneously produce display signals. The claims and specification do not limit the subsystem to a hardware only implementation. Similarly, the claim language and specification do not discuss “simultaneously produc[ing] display signals.” The use of the word

simultaneous is in relation to “retrieving for playback,” and not “produce display signals.” The Court hereby construes “output subsystem” to mean “a subsystem in the digital video recorder wherein the subsystem produces output signals.”

4. *“Allows playback rate and direction of each multimedia program to be controlled individually and simultaneously to perform any of fast forward, rewind, frame step, pause, and play functions”*

a. Parties’ Proposed Constructions

Plaintiff believes that no construction is necessary for “allows playback rate and direction of each multimedia program to be controlled individually and simultaneously to perform any of: fast forward, rewind, frame step, pause, and play functions.” Dkt. No. 148 at 28. In the alternative, Plaintiff proposes construing the term to mean “permits playback rate and direction of each multimedia program to be controlled individually and simultaneously to do one or more of the following functions: fast forward, rewind, frame step, pause, or play.” *Id.* Plaintiff argues that its proposed alternative construction is in accordance with its ordinary meaning.

Defendants submit that this term should be construed to mean “is capable of changing the playback rate and direction of each multimedia program such that each program can be independently and simultaneously controlled to execute fast-forward, rewind, frame-step, pause and play modes.” Dkt. No. 151 at 30. Defendants argue that their proposed construction is consistent with the plain meaning of this term and explains that “the claimed invention must allow for control of both rate and direction of playback to perform all of the listed playback modes.” *Id.* Defendants argue that Plaintiff’s proposed construction eliminates the requirement that the invention allows for the execution of any of the listed modes. *Id.*

b. Discussion

The main dispute between the parties center around the meaning of the word “and” in the list of functions. Defendants’ proposed construction requires that the device be capable of fast-forward, rewind, frame step, pause and play. Plaintiff’s proposal would require the device to only have to be able to perform one of those functions. The specification states that “[t]he invention additionally provides the user with the ability to store selected television broadcast programs while simultaneously watching or reviewing another program and to view stored programs with at least the following functions: reverse, fast forward, play, pause, index, fast/slow reverse play, and fast/slow play.” ’465 Patent at 3:30-36. Therefore, a person of ordinary skill in the art would, in the context of the entire patent, understand the claimed system be able to perform any of the listed functions, instead of only one of the listed functions. *Phillips*, 415 F.3d at 1313. Accordingly, the Court construes the term to mean: “is capable of changing the playback rate and direction of each multimedia program such that each program can be independently and simultaneously controlled to execute any of the following modes: fast-forward, rewind, frame-step, pause and play.”

3. “Module”

a. Parties’ Proposed Constructions

Plaintiff submits that no construction is necessary for this term. In the alternative, Plaintiff proposes that “module” be construed to mean “a portion of a device and/or a software program that carries out a specific function and may be used alone or combined with other modules of the same device or program.” Dkt. No. 148 at 24. Plaintiff argues that the term module should not be construed in the abstract. *Id.* Plaintiff states that in the context of the

claims, none of the recited modules are used alone but are combined with other modules. *Id.*

Plaintiff also points out that nothing in the patents require that the module operate as a standalone unit.

Defendants propose that “module” should be construed to mean “separate, standalone software unit that can function on its own” Dkt. No. 151 at 28. Defendants argue that the patent specification uses the term module to refer to separate standalone software units that can function on their own. *Id.*

b. Discussion

As discussed with respect to the '015 Patent, the parties dispute whether a module is able to function on its own. The claims and specification of the '465 Patent do not require that each of the claimed modules be able to function on its own. The Court therefore construes “module” to mean “a portion of a device and/or a software program that carries out a specific function and may be used alone or combined with other modules of the same device or program.”

6. “Remote control”

Plaintiff argues that no construction is necessary for “remote control.” Dkt. No. 148 at 29. According to Plaintiff, a jury can readily understand the term in the context of selecting and recording TV programs without further construction. *Id.* Defendants submit that this term should be construed to mean “a device that can be used to control the operation of the digital video recorder from a distance.” *Id.*

The Court finds that not construction is needed for this term. *See O2 Micro Intern'l Ltd. v. Beyond Innovation Technology*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted

claims.”).

7. “Input Signal Tuners” and “said tuners accept analog and/or digital multimedia program signals”

a. Parties’ Proposed Constructions

Plaintiff submits that “input signal tuner” does not require construction. In the alternative, Plaintiff submits that the term should be construed to mean “hardware and/or software used to select a specific multimedia program.” Plaintiff also submits that “said tuners accept analog and/or digital multimedia program signals” should be construed to mean “the input signal tuners may accept: 1) analog multimedia program signals, or 2) digital multimedia signals, or 3) both analog and digital multimedia signals.”

Defendants submit that “input signal tuner” should be construed to mean “a device that can be adjusted to accept desired frequency ranges.” Dkt. No. 151 at 34-35. Defendants also submit that “said tuners accept analog and/or digital multimedia program signals” should be construed to mean “the input signal tuners are capable of accepting both analog and digital multimedia program signals.” *Id.* at 35. Defendants argue that the specification states that the “tuner” must adjust to accept a desired frequency range, but Plaintiff’s proposed construction covers any hardware or software that selects a specific program, even if it cannot tune to a frequency range. *Id.* Defendants also argue that the Court had previously construed a similar term from the ’389 Patent, “tuning said TV Signals to a specific program,” as “tuning said TV signals to a specified frequency range.” *Id.* Defendants submit that because the ’389 and ’465 Patents share the same specifications, the “tuner” of the ’465 Patent must also accept a frequency range. *Id.*

Plaintiff replies that Defendants' reliance on the Court's previous construction with respect to the '389 Patent is misleading. Dkt. No. 157 at 15. Plaintiff submits that the Court's previous construction of "tuning" was based on the term's use in the '389 Patent claims, and those claims are not identical to the claims of the '465 Patent. *Id.*

b. Discussion

The specification does not explicitly define an "input signal tuner." However, the specification does state that "the invention easily expands to accommodate multiple Input Sections (tuners)." '465 Patent at 4:19-20. The specification further states that "[t]he Input Section 101 tunes the channel to a particular program." Thus, a fair reading of the specification would indicate that an "input section tuner" tunes to a program.

Defendants argue that the Court should follow its prior construction of "tuning" with respect to the '389 Patent. However, in construing "tuning," the Court only looked to the claims of the '389 Patent to construe that term. *Echostar*, Dkt. No. 185 at 15. The claims of the '465 Patent are different from those of the '389 Patent. Looking at the claims the '465 Patent, claims 7 and 16 both state "wherein each of said tuners is individually tuned to a specific multimedia program." '465 Patent 13:11-12 and 14:27-28. A fair reading of the '465 Patent claims, therefore, also would indicate that an "input section tuner" tunes to a program. Accordingly, the Court hereby construes "input signal tuner" to mean "hardware and/or software capable of selecting a specific multimedia program." The Court further construes "said tuners accept analog and/or digital multimedia program signals" to mean "the input signal tuners may accept: 1) analog multimedia program signals, or 2) digital multimedia signals, or 3) both analog and digital multimedia signals."

VI. Conclusion

For the foregoing reasons, the Court enters this claim construction order.

IT IS SO ORDERED.

SIGNED this 13th day of October, 2011.

A handwritten signature in black ink, appearing to read "David Folsom", written over a horizontal line.

DAVID FOLSOM
UNITED STATES DISTRICT JUDGE