

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

TIVO, INC.,

Plaintiff,

VS.

**VERIZON COMMUNICATIONS,
INC., VERIZON SERVICES CORP., and
VERIZON CORPORATE RESOURCES
GROUP, LLC,**

Defendants.

CIVIL ACTION NO. 2:09-CV-257 (DF)

CLAIM CONSTRUCTION ORDER

Before the Court is Tivo, Inc.’s (“Tivo’s”) Opening Claim Construction Brief. Dkt. No. 139. Also before the Court are Verizon’s Responsive Claim Construction Brief and Tivo’s Reply Claim Construction Brief. Dkt. Nos. 145 and 151, respectively. The Court held a claim construction hearing on disputed terms in Tivo’s patents on June 1, 2011. *See* Dkt. No. 176.

Before the Court is Verizon’s Opening Claim Construction Brief. Dkt. No. 138. Also before the Court are Tivo’s Response Claim Construction Brief and Verizon’s Reply Claim Construction Brief. Dkt. Nos. 143 and 152, respectively. The Court held a claim construction hearing on disputed terms in Verizon’s patents on June 2, 2011. *See* Dkt. No. 178.

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.

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I. Background

Tivo 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 “Tivo Patents”). 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.” Certain claim terms in the Tivo Patents 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*”) and in *Tivo Inc. v. AT&T Inc.*, Civ. Act. No. 2:09-cv-259, Dkt. No. 210 (hereinafter “*AT&T CC Order*”).

Verizon alleges infringement of United States Patent Nos. 5,410,334 (“the ’334 Patent”); 5,635,979 (“the ’979 Patent”); 5,973,684 (“the ’684 Patent”); 6,367,078 (“the ’078 Patent”); and 6,381,748 (“the ’748 Patent”) (collectively, “the Verizon Patents”). Verizon previously asserted United States Patent No. 7,561,214 against Tivo, but that patent was dismissed from the case on May 19, 2011. Dkt. No. 171. The ’344 Patent is titled “Apparatus and Method of Selecting Video Programs Based on Viewers’ Preferences.” The ’979 Patent is titled “Dynamically Programmable Digital Entertainment Terminal Using Downloaded Software to Control Broadband Data Operations.” The ’684 Patent is titled “Digital Entertainment Terminal Providing Dynamic Execution in Video Dial Tone Networks.” The ’078 Patent is titled “Electronic Program-Guide System with Sideways-Surfing Capability.” The ’748 Patent is titled “Apparatus and Methods for Network Access Using a Set Top Box and Television.”

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) “object,” “sink object,” “control object,” and “source object”; (2) “obtains data stream buffers”; (3) “transform object,” “automatically flow controlled,” “wherein said source object . . . ,” “wherein said transform object . . . ,” and “wherein said sink object . . . ”; (4) “temporarily stores said video and audio data”; (5) “wherein said source object extracts . . . ,” and “wherein said source object converts. . . ”; (6) “control the flow of the broadcast data through the system”; and (7) “wherein said control object sends”

1. “Object,” “sink object,” “control object,” and “source object”

a. Parties’ Proposed Constructions

TiVo 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. 139 at 8. TiVo points out that the Federal Circuit affirmed the court’s constructions in the EchoStar appeal. *Id.* TiVo argues that Verizon’s proposed construction seeks to further construe the terms in the Court’s construction and adds unnecessary and unsupported verbiage to the Court’s previous construction. *Id.*

Verizon responds that its proposed constructions are based on the intrinsic record and argues that TiVo narrowed and clarified the meaning of “object” during reexamination. Dkt. No. 145 at 6-7. Verizon submits that TiVo explained its claims “in more explicit terms” during reexamination and the jury should have the benefit of TiVo’s more explicit explanation. *Id.* at 5.

TiVo replies that Verizon has failed to address the legal test for determining if TiVo limited the scope of the ’389 Patent during reexamination. Dkt. No. 151 at 1. TiVo states that Verizon has not explained how TiVo’s statements are clear and unambiguous surrender of subject matter or how TiVo’s comments during reexamination narrows the scope of “objects.” *Id.*

b. Discussion

The Court previously considered “object,” “sink object,” “control 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 TiVo 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 adopts its prior construction of “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.” The Court 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.” The Court also adopts its previous 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.”

2. “Obtains data stream buffers”

a. Parties’ Proposed Constructions

TiVo argues that this term does not need further construction. Dkt. No. 139 at 10. TiVo submits that the Court properly decline to further construe the term during *Echostar* and the jury was able to ably apply the Court’s construction. *Id.* Verizon respond that their proposed construction would be helpful to the jury by clarifying that the buffers that are obtained contain data streams. Dkt. No. 145 at 15. Verizon point out that their proposed construction is how TiVo’s infringement expert explained it to the jury in the *Echostar* case *Id.* TiVo replies that Verizon’s reliance on the expert’s testimony is improper because the expert also testified that the data stream buffers do not need to be full of data. Dkt. No. 151 at 6.

b. Discussion

The Court previously considered “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 data stream buffers.” The Court is not persuaded that its previous construction should be changed or that “obtains data stream buffers” requires additional clarification or construction.

3. ***“Transform object,” “automatically flow controlled,” “wherein said source object is automatically flow controlled by said transform object,” “wherein said transform object stores and retrieves data streams onto a storage device,” and “wherein said sink object is automatically flow controlled by said transform object”***

a. Parties’ Proposed Constructions

TiVo 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.” Dkt. No. 139 at 11. TiVo also proposes that “automatically flow controlled” continue to be construed as “self-regulated.” *Id.* TiVo argues that Verizon’s proposed construction and supporting arguments “are based on significant and unsupported revisions to TiVo’s actual statements during the reexamination.” *Id.* TiVo submits that Verizon’s proposed construction does not clarify claim scope or aid the jury in better understanding the claimed invention. *Id.* at 13.

Verizon responds that TiVo’s arguments to the USPTO during reexamination of the ’389 Patent narrowed the scope of “transform object” and “automatic flow control.” Dkt. No. 145 at 10. Verizon submits that TiVo described “transform object” during reexamination as something that “intelligently manages buffers or the manipulation of the video and audio data so as to facilitate the system’s ability to handle asymmetric memory demands of the source and sink objects.” *Id.* Thus, argues Verizon, the Court’s construction of “transform object” and

“automatic flow control” should be revisited. *Id.* at 11. Verizon argues that the jury should be allowed to consider the same explanation that TiVo gave the USPTO during reexamination. *Id.* at 11.

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 also previously considered “automatically flow controlled” and construed “automatically flow controlled” to mean “self-regulated.” *Echostar* CC Order at 24. The Court does not find that TiVo 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 “transform object” to mean “a collection of data and operations that transforms the form of data upon which it operates” and “automatically flow controlled” to mean “self-regulated.” Because of the Court’s prior construction of “source object” and “sink object,” the Court finds that the phrases “wherein said source object is automatically flow controlled by said transform object,” “wherein said transform object stores and retrieves data streams onto a storage device” and “wherein said sink object is automatically flow controlled by said transform object” need no further construction.

4. “Temporarily stores said video and audio data”

a. Parties’ Proposed Constructions

TiVo contends that no construction is necessary for this term. Dkt. No. 139 at 14. Alternatively, TiVo argues that if the Court finds that construction is necessary, the term should be construed to mean “temporarily places or holds the video and audio data.” *Id.* TiVo believes

the phrase is straightforward and requires no construction.

Verizon proposes that the term be construed to mean “the physical data source places the video and audio data into memory temporarily.” Dkt. No. 145 at 15. Verizon states that its proposed construction clarifies that the process of temporarily storing video and audio data is performed by the physical data source, as stated in the claims. Verizon submits that TiVo ignores the patent by arguing that some other component may be responsible for placing data into memory. *Id.*

TiVo replies that Verizon’s contention that the physical data source places data into memory is unfounded. Dkt. No. 151 at 6.

b. Discussion

Verizon argues that the process of “temporarily storing” is performed by the physical data source as described by the specification and therefore this term should be construed to mean that “the physical data source places the video and audio data into memory temporarily.” However, Verizon does not point to any portion of the specification that discusses the physical data source placing data into memory temporarily. Likewise, the Court does not find such a disclosure by TiVo in the file history. As Verizon admits in its briefing, the claim language is clear that “the physical data source must temporarily store the video and audio data.” Accordingly, the Court finds that “temporarily stores said video and audio data” does not require further construction.

5. “Wherein said source object extracts video and audio data from said physical data source” and “wherein said source object converts video data into data streams and fills said buffers with said streams”

a. Parties’ Proposed Constructions

TiVo submits that these phrases do not need additional construction given the Court’s

previous construction of “source object” and “buffer.” TiVo states that Verizon’s proposed construction rephrases the claim so that the source objection takes data out of the physical data source. However, TiVo argues, the claim does not require this proposed limitation.

Verizon proposes that the Court construe “wherein said source object extracts video and audio data from said physical data source” to mean “the source object takes video and audio data out of the physical data source” and “said source object converts video data into data streams and fills said buffer with said streams” to mean “said source object converts the video data it has taken from the physical data source into video data streams and fills said buffer with said streams.” Dkt. No. 145 at 16. Verizon explains that its proposed construction is consistent with the specification which states that the “source object 901 takes data out of the physical data source . . . and places it into a PES buffer.” *Id.* at 17. Verizon also argues that the plain language of the claim requires the source objection to extract video and audio data from the physical data source. *Id.* TiVo replies that nothing prevents the source object from simply obtaining or deriving a copy of the data from the physical data source rather than taking the data out of the physical data source. Dkt. No. 151 at 7.

b. Discussion

The Court addressed the construction of “source object” and “buffer” above. The parties’ main dispute regarding this term is the meaning of “extract.” Verizon’s proposed construction would have the source object remove data from the physical data source. However, nowhere does the specification or claim state that the physical data source no longer contains the data that was just extracted. Accordingly, the Court hereby construes for “wherein said source object extracts video and audio data from said physical data source” to mean “wherein the source object

obtains video and audio data from said physical data source.” In light of the Court’s previous construction of the terms “source object” and “buffer,” no further construction is required for “said source object converts video data into data streams and fills said buffer with said streams.”

6. “Control the flow of the broadcast data through the system”

a. Parties’ Proposed Constructions

TiVo submits that this term does not require construction. Alternatively, TiVo proposes that the term be construed to mean “control the flow of the broadcast data within the system.” Dkt. No. 139 at 16. TiVo argues that Verizon’s proposed construction is “overly narrow” and inconsistent with the specification. TiVo submits that Verizon’s proposal appears to require that every user command control the entire data flow through the pipeline, which is contrary to the description of control objection in the specification and would exclude embodiments of the invention. *Id.* at 17.

Verizon responds that this term should be construed to mean “control the transmission of the broadcast data from the physical data source to the display.” Verizon argues that its construction makes clear that “through the system” means “from the physical data source to the display.” Dkt. No. 145 at 18.

TiVo replies that Verizon’s proposed construction would limit the term to require that every command issued by a user control the flow of broadcast data through the entire system. Dkt. No. 151 at 8. TiVo argues that the embodiment Verizon relies on for its construction is not made of one pipeline, as Verizon suggests, but of three pipelines that are controlled asynchronously. TiVo states that the specification discloses an embodiment in which a user pause command only pauses only a portion of the flow associated with the sink. *Id.*

b. Discussion

This term appears in both asserted claims 31 and 61. The parties dispute whether user commands have to control the transmission of the broadcast data from the physical data source to the display or if user commands control the flow of broadcast between any two points in the system. The specification discusses an embodiment in which a user “pause” command pauses only the flow portion associated with the sink. ’389, 9:22-32. Thus, the specification contemplated the possibility that a user command could only control the flow between two points within the system. Accordingly, the Court hereby construes “control the flow of data through the system” to mean “control the flow of the broadcast data within the system.”

7. *“Wherein said control object sends flow command events to said source, transform, and sink objects”*

a. Parties’ Proposed Constructions

TiVo submits that this term does not require construction in light of the Court’s prior construction of “source object,” “transform object,” “sink object,” and “control object.” Dkt. No. 139 at 18. Alternatively, TiVo proposes that the term be construed to mean “the control object sends information relating to a change of condition in the flow of the broadcast data to the source, transform and sink objects.” *Id.* TiVo argues that Verizon’s “strategy of asking to construe the entire clause would wrongly rewrite the claims.” *Id.*

Verizon responds that the term “flow command events” does not have a common meaning and should be construed. Verizon argues that its proposed construction for “flow command events” to mean “commands” sent to the “source, transform, and sink objects that control the flow of the broadcast data within the system” will aid the jury and is consistent with

the specification. Dkt. No. 145 at 20. Verizon argues that its proposed construction involves controlling the flow of data “within the system” as opposed to “through the system.” *Id.*

TiVo replies that an “event” is not a command. Dkt. No. 151 at 9. TiVo argues that Verizon’s proposal to require events to “control the flow of the broadcast data within the system” is unsupported by the claim language and should be rejected. *Id.*

b. Discussion

The Court agrees with TiVo that “flow command events” cannot mean “command.” Otherwise, “event” would have no meaning. Based on the language of the claims, it is apparent that “flow command events” refer to user commands that “control the flow of the broadcast data through the system.” Accordingly, the Court hereby construes “wherein said control object sends flow command events to said source, transform, and sink objects” to mean “the control object sends information relating to a change of condition in the flow of the broadcast data to the 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 Verizon. 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)

“detecting current position in the program material . . .”; (2) “calculating”; (3) “user’s expected termination point”; (4) “adding a positional offset . . .”; and (5) “module.”

1. “Detecting current position in the program material where the termination occurred”

a. Parties’ Proposed Constructions

TiVo submits that this term does not require construction. TiVo proposes, in the alternative, that the term be construed to mean “determining the current position in the program material where the termination of the fast forward or the reverse progression occurred.” Dkt. No. 139 at 26. TiVo argues that Verizon is urging the Court to rewrite the phrase to limit it to determining the point where “the user discontinued” fast forward or reverse. TiVo argues that

the specification “explicitly states” that the invention determines where the program material was stopped.

Verizon submits that this term should be construed to mean “determining the point in the audio or video program where the user discontinued fast forward or reverse mode.” Dkt. No. 145 at 30. Verizon argues that its proposed construction clarifies the term as “determining the point in the audio or video program where the user discontinued fast forward or reverse mode.” *Id.* Verizon submits that this construction is consistent with both the claims and the specification. Verizon also argues that TiVo’s arguments fail to acknowledge the claims’ contradictory present tense versus past tense language. *Id.* at 31.

TiVo replies the ’015 patent “establishes that the point where a user terminates fast forward or reverse progression through a program does not necessarily equal the point in the program where that termination actually occurs.” Dkt. N. 151 at 12. TiVo argues that the claimed invention as detecting the position in the program material where the termination occurred instead of the point where the user discontinued the progression.

b. Discussion

The specification discloses methods by which the system calculates where a user expected to be in a program when fast forward or reverse mode is terminated. According to the language of the claim, it is apparent that one of the initial steps to such a calculation would be determining what point in the program the fast forward or reverse mode stopped on. Accordingly, the Court construes “detecting current position in the program material where the termination occurred” to mean “determining the current position in the program material where the termination of the fast forward or the reverse progression occurred.”

2. *“Calculating,” “calculating a new position in the program material,” “calculating step,” and “calculates the new position based on a user-selected speed of the fast forward or reverse progression”*

a. Parties’ Proposed Constructions

TiVo submits that the term “calculating” does not need construction. Dkt. No. 139 at 27.

TiVo argues that Verizon’s proposed construction adds in language that already appears elsewhere in the claim. TiVo argues that claim construction is not an obligatory exercise in redundancy.

Verizon submits that its proposed construction of “calculating . . . by adding . . . or subtracting” treats the “calculating step consistently with the other terms.” Dkt. No. 145 at 31. Verizon argues that it is not “sufficient” to add or subtract an undefined number of frames, which would not be calibrated to the user’s expected termination point, as required by the claims. *Id.* at 32. TiVo replies that Verizon’s basis for construing this term remains opaque. Dkt. No. 151 at 13. TiVo argues that Verizon’s attempt to limit the claims to the first disclosed embodiment is unsupported by the claims and is improper.

b. Discussion

Verizon’s proposed constructions for these terms incorporate elements already present in the asserted claims, which, if adopted, would render those elements redundant. “Calculating,” on its own, is a commonly understood term that does not require construction. Accordingly, the Court finds that the terms “calculating a new position in the program material,” “calculating step,” and “calculates the new position based on a user-selected speed of the fast forward or reverse progression” also do not require construction.

3. “User’s expected termination point”

a. Parties’ Proposed Constructions

TiVo submits that this claim is not indefinite, no construction is necessary, and the meaning of this phrase is “plain on its face.” Dkt. No. 139 at 27. TiVo argues that Verizon’s proposed construction improperly limits the claims to one embodiment of the disclosed invention.

Verizon argues that this term refers to a user’s subjective expectation of where he intended to be in the program material when he terminated the fast-forward or rewind mode. Dkt. No. 145 at 32. Thus, according to Verizon, the term is indefinite unless it is construed to incorporate the techniques identified in the patent for approximating this point. *Id.* Verizon argues that the prosecution history confirms that the “user’s expected termination point” turns solely on a user’s subjective expectation. *Id.* at 33.

TiVo replies that none of the asserted claims require determining the user’s expected termination point. Dkt. No. 151 at 14. TiVo states that the claims require definite and concrete concepts that do not depend on the subjective intent of a user.

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.

Verizon argue that “user’s expected termination point” is ambiguous, stating that this limitation relies solely on a user’s subjective opinion of where in the program material the user intended to be after stopping the fast-forward or rewind mode. 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.”

4. “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

TiVo submits that no construction is necessary. TiVo 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. 139 at 28. TiVo argues that this term is readily understood based on the claim language in context. *Id.*

Verizon propose construing the term to mean “adding data that identifies the position of an individual video segment within the stream where playback mode should begin when reverse mode or fast forward mode has been terminated.” Dkt. No. 145 at 37. Verizon argues that any position offset must return the program material to where playback should begin when the fast-forward or reverse mode ends. Verizon argues that its proposed construction embodies this idea, but TiVo’s proposed construction “divorces the user’s expected termination point from the positional offset.” *Id.*

TiVo replies that none of the asserted claims require calculating the user’s expected termination point. Dkt. No. 151 at 14. Rather, the positional offset is used to calculate a new

position in the program material and not to place the program material at the position of the user's expected termination point.

b. Discussion

The parties appear to dispute the meaning of “positional offset.” The specification does not equate “positional offset” with a “position of an individual video segment.” Rather, “positional offset” is discussed as if it is a variable or value. '015 Patent, 23:50. 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.”

5. “Module”

a. Parties' Proposed Constructions

Verizon argues that the use of the term “module” should be construed as means-plus-function claims under 35 U.S.C. § 112 ¶ 6. TiVo submits that no construction is necessary for this term. In the alternative, TiVo 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. 149 at 24. TiVo points out that the phrase “means for” is absent from each of the claims, which creates a strong presumption against applying section 112 ¶ 6. TiVo also states that the AT&T Verizon did not seek to have the Court find that the use of the term “module” should be construed as means-plus-function claims.

Verizon submit that the “module” claim elements in claims 9-16 are means-plus-function

elements, but the specification does not disclose a structure for these claims. Dkt. No. 145 at 38. Verizon argues that the “module” claim elements are purely functional and provide no structural limitations.

TiVo replies that Verizon argues that the specification fails to disclose adequate structure to perform the recited functions without first specifically identifying those functions. Dkt. No. 151 at 14. In the alternative, TiVo also replies that the specification adequately describes structure for the recited functions in the claims.

b. Discussion

The Court had previously construed this term and notes that the AT&T Defendants did not argue that the use of “module” in the asserted claims should be construed as means-plus-function elements. *AT&T CC Order* at 25. “Module” is a recognized term of art that courts have recognized as providing sufficient structure to avoid the application of section 112 ¶ 6. *Beneficial Innovations, Inc. v. Blockdot, Inc.*, Nos. 2:07-CV-263, 2:07-CV-555, 2010 WL 1441779, *16 (E.D. Tex. April 12, 2010). Accordingly, the Court declines to construe the use of “module” in the claims as means-plus-function language and adopts its previous construction of “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 Verizon.

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.”

1. “Digital video recorder”

a. Parties’ Proposed Constructions

TiVo 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. 139 at 20. TiVo argues that this proposed construction “flows directly from the use of the term in asserted claims 1 and 10.” *Id.* TiVo 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.*

Verizon submit that “digital video recorder” should be construed to mean “a device capable of recording digital video.” Dkt. No. 145 at 21. Verizon argue that TiVo’s proposed

construction replaces “video” with “multimedia programs” and adds the requirement that the device “allows the user to store” such programs. *Id.* Verizon argues that TiVo’s proposed construction is needlessly complicated and is inconsistent with claims 1 and 10. Verizon argues that TiVo’s construction improperly imports into all claims the limitation of claim 5.

TiVo replies that Verizon seeks to construe these three words in completed isolation from the central purpose of the invention. Dkt. No. 151 at 9. TiVo states that claim 5 recites the use of a “multimedia recording device” to record programs, and that the specification describes a VCR as one example of a “multimedia recording device.” *Id.* Thus, argues TiVo, its proposed construction does not import into all claims the limitation of claim 5.

b. Discussion

The Court previously construed this term to mean “a device capable of recording multimedia programs in digital form” and is not persuaded that its previous construction should change. *See AT&T CC Order at 28.* The Court therefore adopts its previous construction of “digital video recorder” to mean “a device capable of recording multimedia programs in digital form.”

2. “Video segment”

a. Parties’ Proposed Constructions

TiVo believes that no construction of “video segment” is necessary. In the alternative, TiVo proposes construing “video segment” as “a portion of video from a multimedia program.” Dkt. No. 139 at 21. TiVo submits that Verizon’s proposed construction should be rejected because it writes the word “segment” out of the claim. *Id.*

Verizon argues that the term should be construed to mean “all or part of a multimedia

program comprising video.” Dkt. No. 145 at 22. Verizon states that under its construction, the system enables a user to retrieve all or part of the recorded and recording programs. Verizon argues that TiVo’s proposed construction would “improperly limit the invention to retrieving only portions of a program.” *Id.*

TiVo replies that Verizon’s contention that TiVo’s proposed construction would improperly limit the invention to retrieving only portions of a program is nonsensical. Dkt. No. 151 at 10.. TiVo argues that “[n]othing prevents the process from being repeated until a series of segments comprising the entire show is retrieved for playback.”

b. Discussion

The Court previously construed this term to mean “a portion of video from a multimedia program” and is not persuaded that its previous construction should change. *See AT&T CC* Order at 28-29. The Court therefore adopts its previous construction of “video segment” to mean “a portion of video from a multimedia program.”

3. “To cause delivery of selected video segments to an output subsystem”

a. Parties’ Proposed Constructions

TiVo submits that the phrase “to cause delivery of selected video segment to an output subsystem” does not need construction, but proposes, in the alternative, that it be construed to mean “to cause delivery of selected video segments to a subsystem in the digital video recorder, wherein the subsystem produces output signals.” Dkt. No. 139 at 21. TiVo argues that the claims do not requires that “subsystem” be capable of simultaneously producing television signals. *Id.*

Verizon submits that the phrase should be construed to mean “to cause delivery of

selected video segments to a subsystem within the DVR capable of simultaneously producing television signals for the stored program and the program whose storage is in progress.” Dkt. No. 145 at 23. Verizon argues that both claims 1 and 10 require a step or module that “retriev[es] for play back” two video segments by using video segment identifying information to cause deliver of selected video segments to an output subsystem. *Id.*

TiVo replies that nothing in the independent claims requires that the output subsystem be capable of producing television signals. Dkt. No. 151 at 10. TiVo argues that Verizon incorrectly argues that the only purpose of sending video segments to the output subsystem is so that the signals can be produced for display. TiVo points out that dependent claim 5 reveals that the program can be sent to a multimedia recording device. *Id.*

b. Discussion

The Court previously construed “output system” to mean “a subsystem in the digital video recorder wherein the subsystem produces output signals. *See AT&T CC Order at 31.* Verizon’s proposed construction adds a limitation that is not present in the claims – requiring the subsystem to simultaneously produce television signals. The claim language and specification do not discuss “simultaneously produc[ing] television signals.” The use of the word simultaneous is in relation to “retrieving for playback,” and not “produce display signals.” The Court is therefore not persuaded that its previous construction of “output system” should be changed. The Court therefore construes “to cause delivery of selected video segments to an output subsystem” to mean “to cause delivery of selected video segments to 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

TiVo 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. 149 at 28. In the alternative, TiVo 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.* TiVo argues that its proposed alternative construction is in accordance with its ordinary meaning. TiVo argues that Verizon’s construction reads “any of” out of the claim.

Verizon 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. 145 at 24. Verizon argues that “[f]or the user to execute any one of the listed modes, the device must be capable of executing all of the playback modes.” *Id.* Verizon also argues that TiVo conceded the inventors distinguished the asserted claims from the prior art by stated that the alleged invention was capable of performing all of the playback modes.

TiVo replies that Verizon is effectively asking the Court to strike the words “any of” from claims 1 and 10. Dkt. No. 151 at 11. TiVo argues that if the inventors had intended to require the ability to perform all of the recited functions, the claims would state so.

b. Discussion

The Court previously construed this 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” and is not persuaded that its previous construction should change. *See AT&T CC Order* at 32. The Court therefore adopts its previous construction.

5. “Module”

a. Parties’ Proposed Constructions

TiVo submits that no construction is necessary for this term. In the alternative, TiVo 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. 139 at 24. TiVo states that the parties agree that a “module” can include computer hardware. However, TiVo urges that the specification does not support Verizon’s position that the module is limited only to electronic circuitry.

Verizon proposes that “module” should be construed to mean “electronic circuitry in the DVR” Dkt. No. 145 at 28. Verizon argues that its proposed construction is consistent with how a person of ordinary skill in the art would understand the term. *Id.* Verizon argues that TiVo’s arguments would obtain a construction that would not limit a module to a self-contained function

TiVo replies that Verizon’s proposed construction “cherry picks just one of the fourteen possible definitions” for module in hopes of limiting it to electronic circuitry. Dkt. No. 151 at 12. TiVo argues that nothing in the claims, specification, or Verizon’s own extrinsic evidence supports Verizon’s restrictive construction of this term.

b. Discussion

The Court previously construed this term 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” and is not persuaded that its previous construction should change. *See AT&T* CC Order at 33. The Court therefore adopts its previous construction.

VI. U.S. Patent No. 5,410,344

Verizon has asserted claims 2-4, which depend from independent claim 1 of the '344 Patent against TiVo.

The Abstract for the '344 Patent states:

A method and apparatus for selecting audiovisual programs for presentation to a viewer. The audiovisual programs have attributes and a corresponding content code including information pertaining to the attributes. The method includes various steps. First, a viewer preference file is stored which includes information pertaining to the impact of various attributes of the audiovisual programs on the viewer. Second, a plurality of content codes corresponding to a plurality of the audiovisual programs are received. Third, the viewer preference file is compared to the plurality of the corresponding content codes. Finally, at least one of the plurality of audiovisual programs is selected in response to the comparison for presentation to the viewer.

Claim 1 of the '344 Patent recites:

1. A method for selecting audiovisual programs for presentation to a viewer, each of the audiovisual programs having a plurality of program attributes and a corresponding content code comprising a plurality of information fields representing the plurality of program attributes of the audiovisual program, comprising the steps of:

storing a viewer preference file, wherein said viewer preference file comprises a plurality of attribute ratings corresponding to the plurality of program attributes, wherein each of said attribute ratings represents the viewer's preference of the program attribute corresponding to said rating;

for a plurality of the audiovisual programs, receiving a plurality of the corresponding content codes;

for each of said received content codes, comparing said viewer preference file to said corresponding content code such that each of said viewer's attribute ratings is compared with the corresponding information field in said corresponding content code; and

in response to said comparing step, selecting at least one of the plurality of audiovisual programs for presentation to the viewer.

After the claim construction hearing, the parties notified the Court that the following terms do not require construction at this time: “displaying a predetermined audiovisual program to a viewer,” “viewer preference file,” “storing a plurality of preferred audiovisual programs . . .,” “displaying said preferred list of audiovisual programs to a viewer,” “program attribute,” “for each of said received content codes,” and “content code.” Dkt. No. 254 at 3. Accordingly, the terms that remain disputed for the ’344 Patent are: (1) “attribute rating”; (2) “receiving ratings from . . .”; and (3) “soliciting a ranking from . . .”

1. “Attribute Rating”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “a representation of viewer preferences.” Dkt. No. 138 at 3. Verizon argues that its proposed construction comes directly from the claim language while TiVo’s proposed construction adds the notion of a “personal” preference file. Verizon submits that TiVo’s construction is not supported by the claim and should be rejected.

TiVo proposes that this term be construed to mean “data stored in the viewer preference file encoding the viewer’s personal preference for the attribute.” Dkt. No. 143 at 3. TiVo argues

that the language of the claim requires that the attribute ratings represent the preference of a particular viewer. TiVo further argues that the prosecution history distinguishes the prior art program selection as being limited to the subjective evaluation of some third party by stating that the viewer may selection different attributes.

Verizon replies that TiVo's proposed construction attempts to limit the invention to a single viewer, but the claimed invention could be used by multiple viewers. Dkt. No. 152 at 2. Verizon points out that the claim does not reference a personal preference file.

b. Discussion

The point of contention between the parties with respect to this term is whether "attribute rating" should be specific to a single viewer. The specification uses the term "viewer" in the singular and also discusses a "viewer's personal preference" as embodied in the attribute rating. However, there is no disclosure in the specification to indicate that an attribute rating is restricted to one individual only. Furthermore, the claim itself does not reference a personal preference file. Accordingly, the Court construes "attribute rating" to mean "a representation of viewer preference for the attribute."

2. *"Receiving ratings from the viewer corresponding to the attributes for said predetermined audiovisual program, before said updating step"*

a. Parties' Proposed Constructions

Verizon proposes that this term be construed to mean "obtaining ratings data from the user that can be used to modify the stored attribute ratings in the viewer preference file." Dkt. No. 138 at 5. Verizon argues that its proposed construction comes from the specification, which explains that rating data are obtained from the user to modify or supersede the stored attribute

ratings in the viewer preference file. Verizon states that its proposed construction recognizes that each rating may correspond to a single attribute or attributes while TiVo's proposed construction requires that each rating corresponds only to multiple attributes.

TiVo proposes that this term be construed to mean "receiving two or more ratings from a viewer, each of the ratings corresponding to two or more attributes for the predetermined audiovisual program before the updating step." Dkt. No. 143 at 5. TiVo argues that Verizon's proposed construction is aimed at broadening the claim's scope so that only a single act of rating a program is required before the updating step.

Verizon replies that TiVo is attempting to narrow the scope of this term and the claim but does not cite any support for its position. Dkt. No. 152 at 3. Verizon submits that the claim and specification make clear that program attributes may correspond to a single rating.

b. Discussion

The main dispute between the parties is the scope of the word "ratings." TiVo argues that its proposed construction should be adopted because it requires that more than one act of rating a program is required before the updating step. However, the claim and the specification do not support TiVo's argument. The specification also does not describe the ratings as having to correspond to at least two program attributes. Accordingly, the Court construes "receiving ratings from the viewer corresponding to the attributes for said predetermined audiovisual program, before said updating step" to mean "obtaining ratings data from the user that can be used to modify the stored attribute ratings in the viewer preference file."

3. ***“Soliciting a ranking from the viewer for each of said preferred audiovisual programs in a list”***

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “providing the user with an interface to provide inputs to create a ranked order of programs on the preferred list.” Dkt. No. 138 at 6. Verizon submits that the specification teaches different ways to solicit a ranking from a viewer and its proposed construction accommodate all of these embodiments. Verizon argues that TiVo’s proposed construction improperly excludes express embodiments in the specification.

TiVo proposes that the term be construed to mean “seeking to obtain from the viewer user-assigned positions or places for each audiovisual program in the list, *i.e.*, programs in the list are placed on a preference scale relative to one another.” Dkt. No. 143 at 7. TiVo argues that Verizon’s proposed construction is incorrect because it does not capture the active nature of “soliciting.” TiVo further argues that Verizon’s proposed construction divorces the viewer from the ranking.

Verizon replies that its proposed construction is consistent with the specification. Dkt. No. 152 at 5. Verizon argues that the specification “makes clear that the system may ultimately determine the rank of the audiovisual program based on ranking information provided by the viewer.” *Id.*

b. Discussion

This term appears in claim 4 and appears to claim the embodiment of the invention that is shown in Fig. 6 of the ’344 Patent and described at 7:5-20. Verizon argues that the concept of a

user ranking is disclosed in other embodiments described in the specification. However, these embodiments discuss the user entering its “rating” or “preference” and not a “ranking” as is used in claim 4. The inventors apparently intended to differentiate between “ranking,” “rating,” and “preference” and it would be improper to broaden “ranking” to now encompass “rating” or “preference.”

In the embodiment shown in Fig. 6, the viewer is presented with a list of program titles stored in a preferred viewing file. “The viewer ranks the displayed programs on a preference scale which ranges from one to the number of programs” in the preferred viewing file. ’344 Patent, 7:12-14. Thus, it appears that the viewer actively ranks the programs in relation to each other. Accordingly, the Court construes “soliciting a ranking from the viewer for each of said preferred audiovisual programs in a list” to mean “seeking to obtain from the viewer user-assigned positions or places for each audiovisual program in the list, *i.e.*, programs in the list are placed on a preference scale relative to one another.”

VII. U.S. Patent No. 5,635,979

Verizon has asserted claims 3 and 16, which depend from independent claims 1 and 14, respectively, of the ’979 Patent against TiVo.

The Abstract for the ’979 Patent states:

Dynamic programming of a digital entertainment terminal (DET) facilitates operation of the terminal to offer a variety of functionally different broadband services. The terminal can be reprogrammed, as-needed, for each different service offered by one or more information service providers. The terminal includes a network interface module which couples the terminal to a specific type of communication network for receiving a digital broadband channel and providing two-way control signaling communication between the terminal and the network. The terminal also includes a control processor with a program memory. The control processor receives user inputs and controls operations of the

terminal and sending and receiving of control signals over the two-way control signaling channel. The program memory stores data received over the digital broadband channel as software executable by the control processor. The audio/video processor converts compressed, digital information received over the broadband channel into signals for driving an audio/video display device, such as a standard television set. The control processor executes the software received and stored in the memory to control subsequent operations of the terminal, including at least some operations of the audio/video processor and at least some responses to user inputs.

Claim 1 of the '979 Patent recites:

1. A digital entertainment terminal comprising:
a network interface module for coupling the terminal to a communication network, serving a plurality of information service providers, for receiving a digital broadband channel and providing two-way control signaling communication between the terminal and the network;
a control processor controlling operations of the terminal and sending control signals over the two-way control signaling channel through the network interface module in response to selection signals and receiving control signals over the two-way control signaling channel through the network interface module;
means for receiving inputs from a user and providing said corresponding selection signals to the control processor;
program memory for storing software executable by the control processor, wherein in response to a command code within the received control signals received over the two-way signaling channel, the control processor causes data including software to be received over the digital broadband channel from a selected one of the service providers to be stored in the program memory; and
an audio/video processor controlled by the control processor, said audio/video processor being responsive to compressed, digital audio and video information received over the broadband channel to produce signals for driving an audio/video display device,
wherein the control processor executes the software received and stored in the program memory to control subsequent operations of the terminal, including at least some operations of the audio/video processor and at least some responses to the inputs from the user.

Claim 14 of the '979 Patent recites:

1. A digital entertainment terminal comprising:
a network interface module for coupling the terminal to a communication network for receiving a digital broadband channel and providing two-way control signaling communication between the terminal and the network;

a control processor controlling operations of the terminal and sending and receiving control signals over the two-way control signaling channel through the network interface module;

means for receiving inputs from a user and providing corresponding signals to the control processor;

system memory for storing software executable by the control processor, the system memory comprising non-volatile memory storing an operating system for the control processor and random access memory storing application software executable by the control processor, at least a portion of the application software having been received over the communication network; and

an audio/video processor responsive to compressed, digital audio and video information received over the digital broadband channel through the network interface module and controlled by the control processor during execution of said software, the audio/video processor comprising:

(a) an audio/video decoder for decompressing the compressed, digital information received over the broadband channel to produce a decompressed video signal and a decompressed audio signal;

(b) a graphics overlay controller, controlled by the control processor during execution of said software, for generating graphic display information; and

© means for combining the graphic display information with the decompressed video signal, to produce a signal for driving a video display device.

After the claim construction hearing, the parties notified the Court that the following terms do not require construction at this time: “non-volatile memory storing . . .,” “a selected one of the service providers,” “information service providers,” “digital broadband channel,” and “received over the communication network.” Dkt. No. 254 at 3. Accordingly, the terms that remain disputed for the ’979 Patent are: (1) “digital entertainment terminal”; (2) “network interface module”; (3) “the two-way control signaling channel”; and (4) “application software.”

1. “Digital entertainment terminal”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “electronic circuitry contained in

the set-top terminal device for the purpose of providing digital audio/video entertainment to the user.” Dkt. No. 138 at 7. Verizon argues that its proposed construction describes the digital entertainment terminal as it is depicted in the specification. Verizon further argues that TiVo’s proposed construction improperly imports limitations from various embodiments in the specification.

TiVo proposes that this term be construed to mean “a programmable open interface device that interacts with the equipment of a large number of service providers to offer users a wide array of video and interactive multi-media services and to which different service providers can download software.” Dkt. No. 143 at 8. TiVo argues that this term was defined by the specification but Verizon erroneously claims that TiVo’s proposed construction imports limitations from various embodiments into the claim. TiVo argues that every embodiment disclosed in the specification is “a programmable terminal device to which different providers can download software.” *Id.* at 9.

Verizon replies that the asserted claims recite a digital entertainment terminal comprising various specific components. Dkt. No. 152 at 5. However, TiVo’s proposed construction defines the digital entertainment terminal by its possible uses. Verizon argues that the concepts in TiVo’s proposed construction are described as embodiments in the specification and are not found in the claims.

b. Discussion

The specification discloses a need for “set-top terminal devices which process compressed, broadband digital audio video information” and states that the invention addresses this need. ’979 Patent, 3:52-61. Thus, it a digital entertainment terminal is a set-top box and not

just circuitry that is contained in a set-top terminal device. Accordingly, the Court construes this term to mean “a set-top terminal device for the purpose of providing digital audio/video entertainment to the user.”

2. “Network interface module”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “electronic circuitry for physically connecting the terminal device to a particular communication network.” Dkt. No. 138 at 8.

Verizon submits that the specification describes the network interface module as the portion of the digital entertainment terminal that provides “the actual physical connection to the particular type of network.” *Id.* Verizon argues that TiVo’s proposed construction divorces the term “module” from the entire term and gives it separate meaning. Verizon submits that it would be improper to construe the component parts of this term separately.

TiVo proposes that this term should be construed to mean “module for physically connecting the rest of the DET to a particular communication network.” Dkt. No. 143 at 10.

TiVo argues that the main dispute between the parties is Verizon’s attempt to define this term as something separate from the DET. TiVo argues that the network interface module is part of the terminal and its proposed construction is consistent with the language of the claim and specification.

Verizon replies that TiVo’s characterization of the main dispute is incorrect. Dkt. No. 152 at 6. Verizon states that its proposed construction reflects that the network interface module is part of the digital entertainment terminal.

b. Discussion

Claim 1 states that the network interface module is part of the digital entertainment terminal and it would be redundant to incorporate that requirement into the construction of this term. Accordingly, the Court construes “network interface module” to mean “electronic circuitry for physically connecting the terminal device to a particular communication network.”

3. “The two-way control signaling channel”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “channel for sending and receiving of control signals.” Dkt. No. 138 at 11. Verizon submits that the specification makes clear that a two-way control signaling channel is a channel the digital entertainment terminal uses to communicate with the network through the sending and receiving of control signals. *Id.* Verizon argues that nothing in the claim prohibits a portion of a broadband channel to be used for two-way signaling.

TiVo argues that this term is indefinite. In the alternative, TiVo proposes that this term be construed to mean “a two-way signaling channel separate from the broadband channel.” Dkt. No. 143 at 12. TiVo argues that this term is insolubly ambiguous because it lacks an antecedent basis. TiVo states that claims 1 and 14 recite a control process that sends control signals through the network interface module using “the two-way control signaling channel” but there is no earlier recitation of “a two-way control signaling channel.” TiVo argues that this makes it impossible to determine if the claimed “two-way control signaling communication” is carried on a “digital broadband channel” that is the same as the “two-way control signaling channel” or a separate “two-way control signaling channel.” TiVo argues that the term, if not indefinite,

should be construed so that the digital broadband channel is not the same as the two-way control signaling channel. Verizon replies that it is clear that this term refers back to the previous clause and that the digital entertainment terminal provides a two-way signaling channel through the network interface module to the network. Dkt. No. 152 at 8.

b. Discussion

In the asserted claims, the claim recites “a network interface module for providing two-way control signaling communication between the terminal and the network” in the element preceding the use of “the two-way control signaling channel.” It is clear that “the two-way control signaling channel refers back to the preceding clause and the “two-way control signaling communication.” Accordingly, this term is not indefinite. However, the claim language does differentiate between the two-way control signaling channel and the broadband channel. These two terms do not appear to be interchangeable and the specification does not disclose an embodiment where the broadband channel is also used as the two-way control signaling channel. Accordingly, the Court construes “the two-way control signaling channel” to mean “a two-way signaling channel separate from the broadband channel.”

4. “Application software”

a. Parties’ Proposed Constructions

Verizon proposes that this term does not require construction. Dkt. No. 138 at 12. Verizon submits that application software is software that runs under the control of the operating system in order to perform a specific operation or task. Verizon argues that this definition is consistent with how the term was used in the prosecution history, claims, and specification. Verizon argues TiVo’s proposed construction is contradicted by at least one example in the

specification.

TiVo proposes that this term be construed to mean “executable code requested by a user for download to provide an interactive service offered by an information service provider.” Dkt. No. 143 at 14. TiVo argues that the language of claim 14 requires that the application software be executable by the control processor. TiVo further argues that the prosecution history shows that the application software must control interactions with an information service provider.

Verizon responds that nothing supports the constraints added by TiVo’s proposed construction. Dkt. No. 152 at 8. Verizon explains that the specification supports its proposed construction.

b. Discussion

Claim 14 recites, in part, that “at least a portion of the application software having been received over the communication network.” This indicates that “application software” is not limited only to software that is downloaded. Additionally, the specification states that application software “can take an almost infinite variety of forms to facilitate different services” and not just interactive services. ’979 Patent, 4:64-5:5. Accordingly, the Court construes “application software” to mean “software running under control of the operating system for performing some specific task.”

5. *“Means for receiving inputs from a user and providing said corresponding selection signals to the control processor”*

The parties have agreed that the function for this term is “receiving inputs from a user and providing corresponding signals to the control processor.” The parties have also agreed that the structure for this term is IR Receiver 145 of Fig. 1; ’979 Patent, 9:5-13. Joint Claim

Construction Chart at 14.

6. “Means for combining the graphic display information with the decompressed video signal”

The parties agree that the function for this term is “combining the graphic display information with the decompressed video signal.” Joint Claim Construction Chart at 12.

Verizon proposed that the structure for this term should be video RAM 135 of Fig. 1; ’979 Patent, 7:46-50; 7:59-63 and the equivalents thereof. TiVo proposed that the structure for this term should be graphics overlay controller 133 and video RAM 135; ’979 Patent, 7:46-8:22. After the claim construction hearing, the parties reached an agreement and now agree that the structure for this term is video RAM 135 of Fig. 1; ’979 Patent, 7:46-50; 7:59-63 and the equivalents thereof. *See* Dkt. No. 254 at 4.

7. “Means for receiving inputs from a user and providing said corresponding selection signals to the control processor”

The parties have agreed that the function for this term is “receiving inputs from a user and providing corresponding signals to the control processor.” The parties have also agreed that the structure for this term is IR Receiver 145 of Fig. 1; ’979 Patent, 9:5-13. Joint Claim Construction Chart at 11.

8. “Means for combining the graphic display information with the decompressed video signal, to produce a signal for driving a video display driving device”

The parties agree that the function for this term is “combining the graphic display information with the decompressed video signal, to produce a signal for driving a video display device.” Joint Claim Construction Chart at 16.

Verizon proposed that the structure for this term should be video RAM 135 of Fig. 1; ’979 Patent, 7:46-50; 7:59-63 and the equivalents thereof. TiVo proposed that the structure for

this term should be graphics overlay controller 133 and video RAM 135; '979 Patent, 7:46-8:22.

After the claim construction hearing, the parties reached an agreement and now agree that the structure for this term is video RAM 135 of Fig. 1; '979 Patent, 7:46-50; 7:59-63 and the equivalents thereof. *See* Dkt. No. 254 at 4.

VIII. U.S. Patent No. 5,973,684

Verizon has asserted independent claim 13 of the '684 Patent against TiVo.

The Abstract for the '684 Patent states:

Apparatus and method for selectively executing a resident terminal application and an information provider-specific application stored in a digital entertainment terminal adapted to decode broadband data signals from a video dial tone network. The digital entertainment terminal stores the resident terminal application related to native operations including network communications in a nonvolatile memory, and stores the information provider-specific applications used for accessing the information provider's services in a dynamic memory. The digital entertainment terminal is adapted to suspend execution of one of the resident application and the information provider-specific application and begin execution of the other application in response to a toggle input from a user's remote control, and resume execution of the suspended application in response to a second toggle input from the user's remote control. Decoding of received broadband signals from the video dial tone network is based upon stored connection block descriptors, and is thus independent of the suspension of one of the applications. Thus, a user may pause an interactive session to scan broadcast channels, or to initiate a second interactive session.

Claim 13 of the '684 Patent recites:

13. A digital entertainment terminal comprising:

- a user interface adapted to receive a terminal-specific input and an application-specific input;
- a communication interface for receiving encoded streams of data from an interface to a digital broadband data network;
- a first memory for storing a first application enabling communication between the digital entertainment terminal and the digital broadband data network;

a second memory for storing a second application enabling reception of provider services via said digital broadband data network; and
a processing unit for selectively executing said first application and said second application, in response to said application-specific input received by said user interface, to control reception and decoding of received encoded streams of data.

After the claim construction hearing, the parties notified the Court that the following terms do not require construction at this time: “terminal-specific input,” “application specific input,” “communication interface,” “an interface,” “first memory,” and “second memory.” Dkt. No. 254 at 4. Accordingly, the terms that remain disputed for the ’684 Patent are: (1) “digital entertainment terminal”; and (2) “a processing unit for selectively executing”

1. “Digital entertainment terminal”

The parties have agreed that the same construction for this term should be adopted for both the ’979 and ’684 patents. Therefore, in accordance with the Court’s discussion above with respect to this term, this term is construed to mean “a set-top terminal device for the purpose of providing digital audio/video entertainment to the user.”

2. “A processing unit for selectively executing said first application and said second application, in response to said application-specific input received by a said user interface”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “a processor capable of switching among the execution of the first application and the second application based on user input.” Dkt. No. 138 at 17. Verizon submits that TiVo’s proposed construction is lengthy and complicated. Verizon argues that TiVo seeks to limit “processing unit” to a “central processing unit” even though neither the claim nor the specification supports this limitation. Verizon further argues that TiVo seeks to incorrectly define “selectively executing” to mean “suspending,

without termination.” According to Verizon, “selectively executing” refers to the ability of the processor to execute a first or second application after it has been selected, not the process of selection itself.

TiVo proposes that this term should mean “a central processing unit for suspending, without terminating, the execution of either the first application executed from the first memory or second application executed from the second memory and beginning execution of the other application in response to an application-specific input to the user interface (e.g., a toggle input from a user’s remote control), and resuming execution of the suspended application in response to the application specific input.” Dkt. No. 143 at 22. TiVo submits that the main dispute between the parties with respect to this term is what the clause “selectively executing . . . in response to said application-specific input” means. TiVo argues that Verizon’s proposed construction should be rejected because it ignores the prosecution history and deletes “application-specific input” from the claim.

Verizon replies that both parties agree that selectively executing refers to switching or toggling between two applications. Dkt. No. 152 at 10. Verizon argues that this element refers the ability to execute a first or second application after it has been selected. Verizon also argues that TiVo’s proposed construction would limit the “processing unit” to a “central processing unit.”

b. Discussion

The main dispute between the parties is whether or not “selectively executing” requires that an application is suspended when the user switches to a second application or if the first application can be terminated when the user switches to the second application. The

specification describes several instances where the first application is suspended when a user switches to a second application. *See* '684 Patent, 4:40–56; 5:34–36; 14:14–32; 26:47–62; 27:1–7. Additionally, the specification also distinguished the invention from the prior art by describing the prior art as terminals that were “dedicated in functionality to support the interactive session until the session is terminated by the user or information provider.” In the prior art, the user was “locked into” the session and not able to access other terminal functionality. '684 Patent, 3:25–37. Therefore, “selectively executing” appears to require that the first application is suspended when the user switches to a second application. Accordingly, the Court construes this term to mean “a processor for suspending, without terminating, the execution of either the first application or the second application and executing the other application in response to an application-specific input received by the user interface.”

3. *“A first application enabling communication between the digital entertainment terminal and the digital broadband data network”*

Verizon proposes that this term does not require construction. In the alternative, Verizon proposes that this term be construed to mean “a software program that activates transmission of information between the digital entertainment terminal and the digital broadband network.”

TiVo proposes that this term be construed to mean “software (i.e., executable code) that enables communication between the digital entertainment terminal and the digital broadband data network.” After the claim construction hearing, the parties agreed that this term should be construed to mean “software (i.e., executable code) that enables communication between the digital entertainment terminal and the digital broadband data network.” *See* Dkt. No. 254 at 5.

4. “A second application enabling reception of provider services”

a. Parties’ Proposed Constructions

Verizon proposes that this term does not require construction. In the alternative, Verizon proposes that this term be construed to mean “an application different from the first application, that activates reception of provider services.” TiVo proposes that this term be construed to mean “software (i.e., executable code) that enables reception of provider services.” After the claim construction hearing, the parties agreed that this term shall be construed to mean “software (i.e., executable code) that enables reception of provider services.” See Dkt. No. 254 at 5.

IX. U.S. Patent No. 6,367,078

Verizon has asserted claim 6, which depends from independent claim 6, of the ’078 Patent against TiVo.

The Abstract for the ’078 Patent states:

Two-dimensional channel navigation techniques for use in a video distribution system in which broadcast providers each transmit an anchor channel. Some of the broadcast providers may transmit the anchor channel as a single HDTV channel, while the others transmit a set of multiplexed channels including an anchor channel and one or more associated multiplex channels. A receiver which receives the anchor channels and any associated multiplex channels generates an on-screen display which indicates to a viewer the multiplex channels, if any, associated with a currently-selected anchor channel. The on-screen display includes a multiplex indicator with a series of icons, each of the icons representing a particular one of the multiplex channels associated with the currently-selected anchor channel. Each of the icons may be configured to provide an indication of the program content which may be found on the associated multiplex channel. The viewer presses channel right or channel left keys on a remote control or other channel selection device to sequence horizontally through the multiplex channels associated with the selected anchor channel, and uses channel up and down keys to sequence vertically through the anchor channels of the various broadcast providers.

Claim 1 of the '078 Patent recites:

1. A method of providing channel selection in a receiver, the receiver configured to receive a plurality of channels, the method comprising the steps of:
 - (a) displaying a first channel of a sequence of the plurality of channels in response to a first control signal;
 - (b) indicating if there is at least one content-related channel having a content in a same category of the first channel;
 - © displaying the at least one content-related channel in response to a second control signal, wherein the second control signal is different from the first control signal; and
 - (d) displaying a next sequential channel, wherein the next sequential channel comes after a displayed channel in response to a repetition of the first control signal.

After the claim construction hearing, the parties notified the Court that the following terms do not require construction at this time: “navigating,” “displaying,” “indicating,” and “content-related channel having . . .” Dkt. No. 254 at 4. Accordingly, the terms that remain disputed for the '078 Patent are: (1) “receiver”; and (2) “said at least one channel.”

1. “Receiver”

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “a set-top box.” Dkt. No. 138 at 22. Verizon submits that its proposed construction is fully supported by the claim language and the specification. Verizon argues that TiVo’s proposed construction is at odds with the claim language and specification because the “receiver” cannot properly be construed as a “television receiver.” According to Verizon, the invention feeds signals to the television receiver only after all the invented processes take place.

TiVo proposes construing this term to mean “a device, such as a television receiver, that converts an electrical signal into audio or visual form.” Dkt. No. 143 at 30. TiVo argues that Verizon’s proposed construction ignores the specification’s description of this term. Verizon replies and reiterates that a television receiver is outside the scope of the invention. Dkt. No. 152 at 11.

b. Discussion

TiVo argues that Fig. 1 of the ’078 Patent identifies a television as the receiver. However, Fig. 1 is a figure describing a prior art system. Fig. 5 of the ’078 Patent is a figure that describes the invention and shows that a user-interface receives a plurality of channels and user inputs and sends a video to the television. Accordingly, a “receiver” as used by the claims does not include a television receiver, as argued by Verizon. The Court hereby construes “receiver” to mean “a set-top box.”

2. *“Said at least one channel”*

a. Parties’ Proposed Constructions

Verizon proposes that this term be construed to mean “the first channel displayed in response to a first control signal.” Dkt. No. 138 at 26. Verizon argues that this term is not indefinite but refers to the first channel displayed in response to a first control channel.

TiVo argues that this term is indefinite. In the alternative, TiVo proposes that this term be construed to mean “the at least one content related channel.” Dkt. No. 143 at 34. TiVo submits that this term is insolubly ambiguous because it lacks antecedent basis. TiVo contends that because independent claim 1 discloses multiple channels, any of those channels could fit the

context of claim 6, resulting in multiple possible claim scopes. Verizon replies that TiVo is attempting to manufacture and indefiniteness argument where none exists. Dkt. No. 152.

b. Discussion

Claim 1, from which claim 6 depends, states that the “first channel” of a sequence of a plurality of channels is displayed. The invention then indicates if there is “at least one content-related channel” having content in the same category as the “first channel.” The “at least one content-related channel” is then displayed in response to a second control signal. Claim 6 recites navigating from the “first content-related channel” of the “at least one channel” to a “second content-related channel.” It is apparent that the “at least one channel” is referring to the “at least one content-related channel” of claim 1. The term is therefore not indefinite and “at least one channel” is hereby construed to mean “at least one content-related channel.”

3. “Channel”

Verizon proposes that this term be construed to mean “a frequency band assigned to a television station or cable programming network.” TiVo proposes that this term be construed to mean “a continuous stream of program(s) originating from a content provider and mapped to a channel identifier (e.g., a channel number).” After the claim construction, the parties agreed that this term should be construed to mean “a continuous stream of program(s) originating from a content provider and mapped to a channel identifier (e.g., a channel number).” Dkt. No. 254 at 5.

4. “First control signal”

Verizon proposes that this term should be construed to mean “a signal for navigation between channels.” TiVo proposes that this term should be construed to mean “a signal generated in the receiver when a user interacts with a first control device, such as a button or a

key incorporated into the receiver or on a remote control.” After the claim construction hearing, the parties agreed that this term should be construed to mean “a signal for navigation between channels.” *See* Dkt. No. 254 at 4.

5. “Second control signal”

Verizon proposes that this term should be construed to mean “a signal for navigation between channels, different from the first.” TiVo proposes that this term should be construed to mean “a signal generated in the receiver when a user interacts with a second control device, such as a button or a key incorporated into the receiver or on a remote control.” After the claim construction hearing, the parties agreed that this term should be construed to mean “a signal for navigation between channels.” *See* Dkt. No. 254 at 4.

X. U.S. Patent No. 6,381,748

This patent was previously construed by the Eastern District of Virginia. *ActiveVideo Networks, Inc. v. Verizon Commc’ns Inc.*, Case No. 2:10-cv-248 (E.D. Va.). That court later found the ’748 patent to be invalid. That case is now on appeal at the Court of Appeals for the Federal Circuit.

Without ruling on the merits of the motion to dismiss, the Court hereby **DENIES without prejudice** the parties’ request to construe the ’748 patent. If the Federal Circuit reverses the Eastern District of Virginia’s decision regarding the validity of the ’748 patent, the parties may renew their request to construe the ’748 patent.

XI. Conclusion

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

IT IS SO ORDERED.

SIGNED this 12th day of March, 2012.

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

DAVID FOLSOM
UNITED STATES DISTRICT JUDGE