

FILED

**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS,
SAN ANTONIO DIVISION**

JUL 15 2011

CLERK, U.S. DISTRICT COURT
WESTERN DISTRICT OF TEXAS
BY DEPUTY CLERK

TWO-WAY MEDIA LLC,
Plaintiff,

v.

AT&T INC., et al.,
Defendants.

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CAUSE NO. SA-09-CA-476-OG

MARKMAN ORDER

In this patent infringement case, plaintiff Two-Way Media (TWM) alleges that defendants AT&T, Inc. *et al.* infringed on five of its patents: U.S. Patent numbers 5,778,187 (the '187 Patent), 5,983,005 (the '005 Patent), 6,434,622 (the '622 Patent), 7,080,153 (the '153 Patent), and 7,266,686 (the '686 Patent). TWM's patents claim various methods and systems for sending and monitoring streams of digital audio and video information over computer networks, such as the Internet.¹

I. Applicable Law

A patent infringement case "involves two steps: the proper construction of the asserted claims and a determination as to whether the accused method or product infringes the asserted

¹ The specification describes the field of the invention:

This relates to a method and apparatus for providing audio and/or visual communication services. in real-time to a multiplicity of identifiable users on a communications network, such as the Internet. In a preferred embodiment. the invention monitors which users are receiving signals on which one of a plurality of channels and modifies the content of at least some signals in response thereto. A particular application is to provide services akin to multi-channel radio or television with commercial programming content adjusted in accordance with the identity of the individual user.

¹'187 Patent, Col.1, ll. 5-15.

claims as properly construed.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The first step—claim construction—is a legal issue for the Court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 391 (1996). The purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), aff’d 517 U.S. 370 (1996). “When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute.” O2 Micro Intern. Ltd. v. Beyond Innovation Technology Co., Ltd., 521 F.3d 1351, 1360 (Fed. Cir. 2008). The scope of a patent is determined by the claims that appear at the end of the patent document. 35 U.S.C. § 112; Burke, Inc. v. Bruno Indep. Living Aids, Inc., 183 F.3d 1334, 1340 (Fed. Cir. 1990).

Patents are presumed written for persons skilled in the field of the invention. Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc). For that reason, the proper construction of a disputed claim requires the term be interpreted as it would by a person of ordinary skill in the art at the time of the invention. Innova/Pure Water, Inc. v. Safari Water Filtration Sys. Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004).

Several sources guide this hypothetical person of ordinary skill in the art. “Those sources include ‘the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” Phillips, 415 F.3d at 1314 (quoting Innova, 381 F.3d at 1116). The Court of Appeals for the Federal Circuit has consistently cautioned district courts that they must begin their claim-interpretation inquiries with intrinsic evidence: (1) the claims themselves; (2) the specification; and (3) the prosecution history, if in evidence. See, e.g., Vitronics Corp. v.

Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001). Intrinsic evidence is highly probative because “[it] is the most significant source of the legally operative meaning of disputed claims language.” Vitronics, 90 F.3d at 1582.

Within the realm of intrinsic sources, the Federal Circuit explicitly requires district courts to “begin by look[ing] to the words of the claims themselves.” Acumed LLC v. Stryker Corp., 483 F.3d 800, 805 (Fed. Cir. 2007) (quoting Phillips, 415 F.3d at 1314); see Vitronics, 90 F.3d at 1582; Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 326 F.3d 1215, 1219 (Fed. Cir. 2003) (“We begin our claims construction analysis with the words of the claim.”); see also Renishaw PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (“[T]he claim construction inquiry . . . begins and ends in all cases with the actual words of the claims.”).

After examining the claims themselves, the Court examines the specification because the specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” Phillips, 415 F.3d at 1315 (quoting Vitronics, 90 F.3d at 1582). Courts are to rely on the common meaning of words: “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction will only” involve the application of commonly accepted words. See Brown v. 3M, 265 F.3d 1349, 1352 (Fed. Cir. 2001); cf. U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“[Claim construction] is not an obligatory exercise in redundancy.”).

The final form of intrinsic evidence the Court considers is the prosecution history when it is in evidence. Although the prosecution history “represents an ongoing negotiation between the

PTO and the applicant” and therefore “often lacks the clarity of the specification and thus is less useful for claim construction purposes,” it can nonetheless “often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” Phillips, 415 F.3d at 1317.

Besides the intrinsic evidence, the Court may also consult dictionaries, treatises, and expert or inventor testimony— i.e., extrinsic evidence— in the claim construction analysis. Id. “[W]hile extrinsic evidence can shed useful light on the relevant art, . . . it is less significant than the intrinsic record in determining the legally operative meaning of claim language.” Phillips, 415 F.3d at 1317 (internal quotations marks omitted).

II. Disputed Claims

A. Terms Relating to Streams and Content

1. “real-time information” (’622: Claims 1, 13, 16, 17, 24, 26, 28, 29)

TWM: “approximately the same information being sent at approximately the same time to everyone who is enabled to receive the information”

AT&T: “information provided to users at the same rate that the users consume or perceive the information”

TWM's proposed construction adopts the definition set forth in the specification: a stream is “real-time in that for a given channel of information, approximately the same information is being sent at approximately the same time to everyone who is enabled to receive the information.” Col. 2, ll. 13-16.² It is altogether proper for the patentee to define terms in the

² Because the specifications of the TWM Patents are identical, citations will be to the '187 Patent. All patent citations will be to the '187 Patent unless otherwise noted.

specifications. See Phillips, 415 F.3d at 1316 ("Consistent with that general principle, our cases recognize that the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs."); see also Irdeto Access, Inc. v. Echostar Satellite Corp., 383 F.3d 1295, 1300 (Fed. Cir. 2004) ("It is well-established that the patentee can act as his own lexicographer, so long as he clearly states any special definitions of the claim terms in the patent specification or file history.").

AT&T would define "real-time" as information provided to users at the same *rate* as users consume the information. It argues first that this is the definition understood by persons of skill in the art at the time. AT&T cites an extrinsic dictionary in support of its construction. Courts may rely on such dictionaries "when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." Vitronics, 90 Fed. 3d at 1584 n. 6. The issue is not what a skilled person would understand the term to mean divorced from the patent, but how that person would understand the term in the context of the patent as a whole.

AT&T also argues that TWM's definition is inconsistent with the usage of the term in the claims in that it erroneously excludes the possibility that real-time information could be provided to only one user. This is not the case. There is nothing in TWM's definition that would preclude the provision of "real-time" information to a single user. AT&T's argument ignores the possibility that only one user has requested the stream, and therefore, is the only user "enabled to receive" it. As the first claim of the '622 patent states: "What is claimed is: 1. A method for monitoring the forwarding of real-time information to *at least one user . . .*" '622 Patent, Claim 1

(emphasis added).

The Court adopts TWM's definition.

2. "stream" terms

a. "stream(s) of addressed digital packets" ('187: Claims 1, 49; '005: Claims 1, 65, 67)

TWM: "Continuous sequence of bundles of digital data, including a destination address"

AT&T: "continuously transmitted sequence of bundles of digital data representing audio and/or visual information that is transmitted without user request, including a destination address"

b. "stream(s) of audio and/or visual information" ('187: Claims 1, 19, 49, 50; '005: Claims 1, 25, 65, 66, 67, 68)

TWM: No construction necessary, or in the alternative, "a continuous sequence of audio and/or visual information"

AT&T: "continuously transmitted flow(s) of data representing audio and/or visual information that is transmitted without user request"

Both parties agree that streams are continuous sequences of bundles of digital data that include a data address. The first disagreement is AT&T's insertion of "transmitted" between "continuous" and "sequence." In other words, is a stream a "continuous sequence" or a "continuously transmitted sequence"? The Court is unclear why TWM objects to the requirement in AT&T's definition that a stream be transmitted. It appears that TWM's dispute is with the word "continuous," although TWM's definition includes that word. For example, TWM argues in its reply brief that:

Regarding AT&T's second requirement that a stream be "continuously transmitted," the claims contain no word that is synonymous with "continuous." Nor does the specification mention that the stream transmission is continuous, much less that it must be continuous.

TWM Reply at 3.

It appears obvious from a study of the tutorials that the continuous sequences of data must be transmitted from where they originate or are stored to reach the user. Further, the claims themselves expressly say that the stream and the message packets are transmitted— "[a] method for transmitting message packets over a communications network . . ." '187 Patent, Claims 1, 49. See also '005 Patent, Claims 1, 65, 67 ("[a] method for transmitting at least one stream of audio and/or visual information over a communications network . . .").

The question becomes whether the continuous sequence of bundles of data must be transmitted to be a stream. TWM argues that the specification

describes several discontinuities encountered by transmitted streams. For example, the streams are "processed by Receiver/Decoder 110, which decodes the signal and provides an incoming audio stream." ['187 Patent] at col. 4, ll. 27-29. A stream may also be recorded "so that it can be played back at a later time" (i.e., not continuously transmitted). *Id.* at col. 4, ll. 35-38. The Media Servers may process the stream to "dynamically vary the packet size to accommodate changes in network conditions." *Id.* at col. 7, ll. 1-14. Each of the above examples from the specification is a discontinuity in transmission that would be excluded under AT&T's proposed constructions.

TWM Brief at 11. These "discontinuities" show nothing more than that the data may temporarily cease its flow. For instance, that the data may be recorded for later playback does not mean they are no longer data, but it does mean that they are no longer flowing or transmitted. In other words, they are no longer a stream, but are at rest. This is much the same as water in a stream. As long as the water flows it can be described as a stream, but once the flow is arrested, such as by a dam, the water becomes a reservoir. It is still water, but it no longer flows unimpeded and can no longer be described as a stream.³ Thus, the Court accepts AT&T's qualification that the

³ The noun "stream" conveys a sense of flowing motion. The OXFORD ENGLISH DICTIONARY (2d ed. 1989; online version March 2011) defines "stream" both as: "A course of water flowing continuously along a bed on the earth, forming a river, rivulet, or brook" and "[a]n

data must be "transmitted" to be a stream.

The second dispute is whether the data streams must be transmitted "without user request" as AT&T contends. AT&T argues that according to the specification, the user merely selects a "channel" and that selection "start[s] a series of events initiating the streaming." AT&T Brief at 10. The events divorcing the user from the continuously transmitted stream of data, according to AT&T, are the intermediate functions that occur after the user selects a channel. For instance, "the user requests a channel, and the disclosed system determines what stream representing that channel to send based on various factors such as load and provides the user computer a list of Media Servers to query for the stream. col. 14, ll. 13-53." Id. "Indeed, having the system, not the user, select the stream is important to the invention described in the specification because the system considers overall system usage in determining which stream to send and from which Media Server to send it. *See* col. 8, ll. 28-36." Id.

TWM counters that AT&T's construction is contrary to the specification, which explains that the stream is only transmitted in response to a selection signal from the user. "When the Media Server receives a valid PLAY command, it initiates the delivery of audio information to the User Note that this could be in the form of broadcast, multicast or unicast packets to a specific UDP port." Col. 14, ll. 51-55. Indeed, TWM argues that the terms "channel" and "stream" are interchangeable in that each channel consists of an independent stream of

uninterrupted succession of persons, animals, or things, moving constantly in the same direction." WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY at 2258 (1976) defines it as "a continuous procession moving in one direction."

information.⁴

Clearly, the user's commands initiate and discontinue the streams of data, even if those commands are routed through intermediary servers. Col. 14, l. 64 - col. 15, l. 4. As AT&T notes in its tutorial, "[u]sers can select particular streams of real-time audio with a software application installed on their computers." AT&T Tutorial at 9. The critical factor is that users choose to initiate a particular stream of data— in AT&T's example an audio stream. In other words, the stream is only transmitted in response to the user's request. The Court finds that "without user request" is contrary to the specification.

Thus, the Court construes "stream(s) of addressed digital packets" as "a continuously transmitted sequence of bundles of digital data, including a destination address", and it defines "stream(s) of audio and/or visual information" as "a continuously transmitted sequence of audio and/or visual information."

3. "a continuous sequence of packets containing audio information" (153: Claims 114, 117)

TWM: See construction above of "[stream(s) of addressed digital] packets." No further construction required, or in the alternative: "a continuous sequence of packets representing audio information"

AT&T: "an uninterrupted series of packets that each contain audio information without interspersed packets containing other nonaudio information"

Again, AT&T seeks to add qualifiers. AT&T asks the Court to restrict the meaning of the phrase to require an "uninterrupted" series of packets, "without interspersed packets containing other non-audio information."

The specification specifically describes non-audio information interspersed with audio

⁴ The Court does not need to decide, and does not decide whether "stream" and "channel" are interchangeable.

packets: "[i]n addition, it should be appreciated that an information stream can consist of audio with supplemental information such as text and graphic images and commands to control software running on the User's computer." Col. 4, ll. 14-17. Likewise, Figure 8B of the '187 Patent illustrates non-audio information interspersed with audio packets. AT&T's construction thus would exclude the preferred embodiment by requiring that the sequence cannot be interrupted or interspersed with non-audio information. See Vitronics, 90 F.3d at 1583 (an interpretation excluding the preferred embodiment "is rarely, if ever, correct and would require highly persuasive evidentiary support.")

The Court rejects AT&T's construction and finds that no further construction is required because the language is clear and easily understood by one skilled in the art.

4. "at least one stream . . . comprises an audio and/or visual selection"

a. "at least one stream of packets comprises an audio and/or visual selection" ('187: Claims 1, 49; '005: Claims 1, 16, 25, 65, 67)

TWM: No construction required except for "audio and/or visual selection"; "at least one stream of packets comprises audio and/or visual content of a stream made available to user(s)"

AT&T: "at least one 'stream' represents the entire audio/video content selected by the user"; Alternate clarification: "at least one 'stream' represents the entire audio/video content selected by and transmitted to the user"

b. "at least one stream of information comprises an audio and/or visual selection" ('187: Claims 19, 50; '005: Claims 25, 66, 68)

TWM: No construction required except for "audio and/or visual selection"; "at least one stream of information comprises audio and/or visual content of a stream made available to user(s)."

AT&T: "at least one 'stream' represents the entire audio/video content selected by the user"; Alternate clarification: "at least one 'stream' represents the entire audio/video content selected by and transmitted to the user"

Judge Hayden Head of the Southern District of Texas construed the phrase “audio and/or visual selection” in an earlier suit brought by TWM against America Online (AOL) alleging that AOL infringed three of the patents at issue in the present suit. AOL proposed that the term be construed as “[a]n individual work such as a song or a music video.” Judge Head rejected AOL’s proposed construction in favor of TWM’s proposal, explaining:

AOL's proposal is inconsistent with the claim language. The claim language does not intimate that a “selection” consists of a whole “individual” work, as AOL suggests. Instead, the disputed term is preceded by the following: “wherein at least one stream of *[p]ackets* comprises an audio and/or visual *selection*.” (emphasis added). The claim itself reveals that merely a *packet* of information, which as recalled from both parties' DVD tutorials, is a digitized part of an audio selection— not the whole selection— constitutes a selection. A stream of packets is short segments of a song. Because those segments are not the entire “individual” song, AOL's proposal does not comport with the claim language.

Two-Way Media LLC v. America Online, Inc., 508 F. Supp. 2d 526, 529 (S.D. Tex. 2007).

Judge Head thus construed “selection” as “audio and/or visual content of a stream made available to user(s).” Id.

AT&T defines the dispute in the present case as “whether the referenced stream must include the entirety of the content sent to the user in response to that user’s selection . . . or merely bits and pieces of the selection (as in TWM's infringement contentions).” AT&T Brief at 12. As has been seen, Judge Head determined that a packet of information (*i.e.* “a digitized part of an audio selection”) constitutes a selection. Thus, a selection does not have to include the entirety of the content.

AT&T argues that by using the term “comprise,” the claim requires the streams to include the entire selection the user has made and received, not merely portions of it. “Comprise” means “to contain; to consist of,” as in “the parts are comprised in the whole.” GARNER, BRYAN A., A

DICTIONARY OF MODERN LEGAL USAGE at 187 (2d ed. 1995). So the phrase, "at least one stream of packets comprises an audio and/or visual selection" can be rephrased as, at least one stream of packets "contains" the audio or video selection.⁵ Again, as Judge Head observed, "a *packet* of information . . . constitutes a selection." Two-Way Media, 508 F. Supp. 2d at 529 (emphasis in original). The language of the claims does not demand that the stream constitute the entirety of the content sent to the user.

AT&T denies that it seeks the same construction as AOL, *i.e.*, that a selection must be an individual song or work. AT&T Brief at 14. AT&T asserts that it "construes a 'selection' as the audio or video content transmitted to the user, be it a song, part of a song, or many songs . . ." Id. Yet, this assertion is inconsistent with AT&T's earlier argument that the stream "must include the entirety of the content sent to the user . . . [not] merely bits and pieces of the selection . . ." Id. at 12. AT&T's proposed construction would add ambiguity to the meaning of the claims because it is not at all clear from its construction just what is meant by "the entire audio/video content selected by the user." The Court therefore adopts TWM's constructions.

5. delivery and receipt of streams

a. "delivery of each stream to each user" ('622: Claim 29)

TWM: See construction below of terms incorporating "delivery." See construction above of "stream[(s) of addressed digital packets]." See construction below of "user." No further construction required.

AT&T: "the delivery of every stream to every user"

b. "which streams of packets were received by which users" ('622: Claim 29)

⁵ The Federal Circuit noted that "comprising" and "includes" are synonymous. SanDisk Corp. v. Memorex Products, Inc., 415 F.3d 1278, 1284 (Fed. Cir. 2005). Therefore, the phrase could also be rewritten: "at least one stream of packets includes an audio and/or visual selection."

TWM: See construction above of "stream(s) of [addressed digital] packets." See construction below of "users." No further construction required.

AT&T: "every stream of packets that every user received"

AT&T seeks to replace "each" and "which" in the claim language with "every." TWM argues that no construction is required. The phrases to be construed appear in the following claim of the TWM Patents:

29. A method for forwarding real-time information to one or more users having access to a communications network comprising:

processing *one or more streams* of audio or visual information into *one or more streams* of packets for forwarding over the communications network, wherein at least one stream of packets comprises audio or video information,

forwarding the digital packets to the users in response to information selection signals received from the users,

verifying the operational status of the users' access to the communications network during delivery of the real-time information, and

updating a database with indications of: (I) *which streams of packets were received by which users*, (ii) the time when *delivery of each stream to each user* commenced, and (iii) the time when *delivery of each stream to each user* terminated.

'622 Patent, claim 29 (emphasis added).

Thus, according to the claim, real-time information is forwarded to users over a communications network (such as the Internet) by first processing one or more streams of information into one or more streams of packets. The packets are then forwarded to users in response to the users' selection signals. Next, the operational status of the users' access to the network is verified, as will be discussed below, by sending and receiving ping objects. Finally, a database is updated "with indications of: (i) *which streams of packets were received by which*

users, (ii) the time when *delivery of each stream to each user* commenced, and (iii) the time when *delivery of each stream to each user* terminated."

The updating of the database is part of the control architecture explained in Part II of the specification. The database is updated when the "initiation of the audio stream by the Media Server causes a log entry to be generated and sent to the Administration Server." Col. 15, ll. 5-7. This permits the Administration Server to "to indicate which Users are listening to which channels[,] . . . identify the User initiating the audio stream . . . [and to learn] when the audio stream is terminated to any User" Col. 15, ll. 8-13; col. 16, ll. 34-37. The Administration Server also uses the information gathered from the Media Servers "to control the advertising content that is downloaded to a particular User in advance of receipt of regular audio programming and/or monitor the delivery of advertising to the Users." Col. 16, ll. 37-41.

AT&T argues that construction of words such as "which" and "each" that have no special technical meaning should adopt ordinary English definitions, unless the specification indicates otherwise. See Phillips, 415 F.3d at 1314. "Each" means, in ordinary English, "every."⁶ AT&T thus argues that recording the "delivery of each stream to each user" requires recording every stream to every user. AT&T argues that this construction is consistent with the specification, which requires recording all of the streams to each user for purposes of billing for advertising and paying copyright royalties.

The Court agrees. The data collection function of the Administration Server, as outlined above, is "critical" to the commercial purposes of the invention. Col. 3, ll. 43-53. Two of the

⁶ The Oxford Dictionary defines each as: "Every (individual of a number) regarded or treated separately." OXFORD ENGLISH DICTIONARY (2d ed. 1989; online version March 2011).

primary commercial purposes are delivering paid commercial advertising to users and assessing copyright royalties.⁷ *Id.* If data were not being collected on every stream being delivered to every user, it would be impossible to calculate the royalties due to copyright holders. In addition, since advertising is delivered along with audio/visual content,⁸ such data collection is necessary to bill advertisers for advertising delivered. The Administration Server additionally uses information about which users are listening to which channels "to control the advertising content that is downloaded to a particular User . . ." Col. 16, ll. 37-39 (emphasis added).⁹ It could not fulfill

⁷ TWM, in its tutorial, stated that "[l]og data can also track the delivery of content, such as songs, programs, and paid advertisements, in order to calculate royalties due to rights holders and revenues owed by advertisers." TWM Tutorial at 19. TWM added that one purpose of the control architecture described above is "monitoring and recording information about the streams and *each* user." *Id.* (emphasis added).

⁸ The delivery of paid commercial advertising information is an important aspect of the present invention. Advertising may be incorporated into the audio stream within the Network Control Center as described above. It may also be incorporated into the audio stream at the User level, or at some intermediate point in the distribution architecture. In addition, the side-bar information discussed above can also include advertising content. FIG. 5 illustrates the provision to the User of two separate streams of packets, one of which may be used for advertising. In this case the insertion of the stream of commercial advertising into the non-commercial stream occurs on the User's computer.

Col. 7, l. 60 - col. 8, l. 4.

⁹ See also Col. 7, ll. 4-14:

FIG. 5 also illustrates packet stream which identifies the User to the system. This enables the system to monitor which Users are listening to which channels and also allows the system to vary, for example, the advertising content delivered to a User.

One advantage of this alternative is to allow targeted commercial delivery based on the individual User.

That is, an individual User would receive the main audio feed plus a

the function of delivering advertising tailored to particular users if it did not know which users were receiving which streams.

TWM argues that the terms presently to be construed refer back to the prior limitations "one or more streams." In other words, "delivery of each stream to each user" should read, "delivery of each of the one or more streams to each of the one or more users."¹⁰ Therefore, according to TWM, each stream and each user does not mean every stream and every user. The Court does not agree. First, the "one or more streams" language is in a separate paragraph of the claim that refers to the distribution architecture of the invention. The phrases to be construed, as we have seen, refer to the control architecture. Second, there is no "one or more streams" language in the specification that limits the "which streams/which channels/which users" language found in the specification. Last, even if one could read the "which streams" language in the claim to refer back to the "one or more streams" language, "one or more streams" plainly does not refer to users. Therefore, TWM is left with a construction that reads, "delivery of each of the one or more streams to each user." Such a construction does not help TWM. "[O]f the one or more streams" is a prepositional phrase modifying "each." TWM is thus left with a construction that requires monitoring the delivery of *each* (of the one or more streams) to each user. In other words, this construction implies that each (*i.e.*, every one) of those one or more streams must be recorded. At best, the construction is unclear as it leaves doubt whether it means every stream or less than every stream.

TWM also argues that by using the transition term "comprising," the claim is open-ended,

particular advertising stream unique to his demographic group.

¹⁰ See TWM's Markman Presentation, Slide A-58.

and therefore, the non-restrictive character of the “comprising” transition does not exclude the presence of additional streams that do not satisfy the claimed limitation. In support of this argument, TWM cites SanDisk Corp. v. Memorex Prods., Inc., 415 Fed. 3d 1278, 1284-85 (Fed. Cir. 2005). AT&T counters that the term “comprising” still requires all of the listed claim elements be met, even if other elements are present.

The term “comprising” is a term of art meaning including but not limited to. CIAS, Inc. v. Alliance Gaming Corp., 504 F.3d 1356, 1360 (Fed. Cir. 2007). While “comprising” permits the presence of additional unrecited components, its application may not be extended so broadly as to alter or abrogate a claim limitation. See Dippin' Dots, Inc. v. Mosey, 476 F.3d 1337, 1343 (Fed. Cir. 2007) (“‘[c]omprising’ is not a weasel word with which to abrogate claim limitations” (quoting Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1380 (Fed. Cir. 1998))).

While “comprising” permits additional elements besides those specifically recited, it does not permit removal of elements specifically recited. Power Mosfet Techs. LLC v. Siemens AG, 378 F.3d 1396 (Fed. Cir. 2004). All elements recited in the claim are construed as having to be present. For example, In re Skvorecz, 580 F.3d 1262 (Fed. Cir. 2009) involved a claim reciting “a wire chafing stand comprising a first rim of wire steel ... having at least two wire legs with each wire leg having two upright sections ... and ... a plurality of offsets located either in said upright sections of said wire legs” The Patent Office argued that the claim was anticipated because it could be construed to include wire legs without offsets due to the use of the open-ended transition term “comprising.” Id. at 1267. The court rejected the PTO's argument holding:

The PTO has not correctly construed the signal “comprising.” This signal simply

means that the device may contain elements in addition to those explicitly mentioned in the claim. . . . The Board erred in holding that some wire legs of the Skvorecz device, as claimed, need not have an offset, when the claims state that *each* wire leg has an offset.

Id. (emphasis added; citation omitted). Similarly, in the present case, the term "comprising" in the preamble does not vitiate the requirement that the database be updated with indications of *which* streams of packets were received by *which* users and the times when delivery of *each* stream to *each* user commenced and terminated. As the court in Dippin' Dots observed, "[t]he presumption raised by the term 'comprising' does not reach into each of the [claimed] steps to render every word and phrase therein open-ended" 476 Fed. 3d at 1343.

The Court adopts AT&T's constructions.

B. Terms Relating to Transmission and Routing

1. **"for each stream, routing such stream to one or more users"** ('187: Claims 1, 49; '005: Claims 1, 65, 67)

TWM: No construction required, or in the alternative, "for each stream, sending the stream over the communications network to one or more users"

AT&T: "for each 'stream,' sending that 'stream' in its entirety to one or more users"

This construction brings us back to the dispute concerning entire streams versus partial streams. See section II.A.4. above. The specification explains that: "Users can start and stop listening to a channel at any time" and that the "user chooses to tune in or tune out a particular channel, but does not choose the time at which the channel distributes its information." Col. 2, ll. 20-22, col. 5, ll. 63-64. Therefore, a user does not need to receive a stream in its entirety as AT&T's construction requires, but can receive as much or as little as he or she chooses. Other claims also oppose AT&T's proposed construction. Claim 16 of the '005 Patent reads, in

pertinent part:

wherein at least one stream of packets comprises audio and/or visual selections and the records that are accumulated indicate which users did or did not listen to and/or view the entire selection.

Claim 13 of the '187 Patent is similar. "Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term."

Phillips, 415 F.3d at 1314-15.

TWM's construction also comports with Judge Head's construction of the same term and his observations that "a 'stream' consists of packets," and that "bedrock computer networking principles" provide that "all the packets of a stream need not follow the same path." Two-Way Media, 508 F. Supp. 2d at 534. Judge Head concluded that "[a]n ordinary skilled person would have this understanding of computer networking. With that understanding, the disputed language in the claim needs no construction." Id.

An ordinarily skilled person in the art would understand the term. The Court finds that no construction is needed.

2. "forwarding" ('622: Claims 1, 6, 29; '686: Claims 1, 3, 16, 17, 22, 26, 33)

TWM: No construction required – plain meaning

AT&T: "transmitting in an unmodified state the same information received"

AT&T's proposed construction adds the restriction that information be forwarded "in an unmodified state." Such a construction is contrary to the specification and to the common meaning of the word. As Judge Head concluded in his supplementary order in the AOL case:

The description of the preferred embodiment expressly includes systems in which the stream of packets changes in some way as it passes through the intermediate computer. For example, the specification states "the Media Servers receive unicast

packet streams and they then duplicate these streams into more unicast streams . . . ,” ([’187 Patent], 5:67-6:2), “the Media Servers can translate the incoming packets into broadcast or multicast packets for transmission to the local networks,” (*Id.*, 6:9-11), and “the Media Server may choose to dynamically vary the packet size to accommodate changes in network conditions.” (*Id.*, 7:12-14). Requiring that the stream of packets remain unchanged as it passes through the intermediate computer would exclude the preferred embodiment from the scope of the claim language.

TWM Brief, Ex. 8 at 4. Moreover, AT&T’s proposed construction is inconsistent with the claims under construction. Claim 1 of Patent ’686 requires “forwarding a real-time media stream . . . wherein said forwarding of said real-time media stream . . . is via unicast, multicast, or any combination of the aforementioned.” Similarly, ’622 Patent, Claim 29 requires “processing one or more streams of audio or visual information into one or more streams of packets for forwarding over the communications network.”

Webster’s Dictionary defines “forward” as “1 : to help onward : PROMOTE . . . 2 a : to send forward : TRANSMIT . . . b : to send or to ship onward from an intermediate post or station in transit . . .” WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 486 (1991). These definitions reflect meanings familiar both to any person of skill in the art and to a layperson. See Phillips, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”).

The Court rejects AT&T’s proposed construction and concludes that no construction of the term is necessary.

3. “controlling the routing”

a. “controlling the routing of the stream of packets in response to selection signals received from the users” ('187: Claims 1, 49, 50; '005: Claims 1, 65, 67)

TWM: ““directing a portion of the routing path taken by the stream of packets from one of a designated group of intermediate computers to the user’ in response to ‘one or more signals from the user selecting the stream’”

AT&T: ““directing a portion of the routing path taken by the stream of packets from one of a designated group of intermediate computers to the user’ in response to ‘[s]ignals from the users selecting a stream’”

b. “controlling the routing of the stream of information through the network in response to selection signals received from the users” ('187: Claims 19, 50; '005: Claims 25, 66, 68)

TWM: ““directing a portion of the routing path taken by the stream of packets from one of a designated group of intermediate computers to the user’ in response to ‘one or more signals from the user selecting the stream’”

AT&T: ““directing a portion of the routing path taken by the stream of information from one of a designated group of intermediate computers to the user’ in response to ‘[s]ignals from the users selecting a stream’”

The dispute here is whether routing the stream of packets or information can be controlled by a signal received from a single user (TWM) or can only be controlled by more than one signal from more than one user (AT&T). The language of the claims and specifications compels TWM's constructions. Claim 1 of the '187 Patent is representative:

A method for transmitting message packets over a communications network comprising the steps of:

converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets complying with the specifications of a network communication protocol,

for each stream, routing such stream to one or more users, *controlling the routing of the stream of packets in response to selection signals received from the users . . .*

'187 Patent, Claim 1 (emphasis added). AT&T notes that "signals" and "users" are plural, and

argues that control of the routing therefore requires multiple signals from multiple users.

However, the "selection signals received from the users" refers back to the "one or more users" phrase. Therefore, the phrase "selection signals received from the users," although plural, can also encompass a signal sent from one user. This construction is supported by the preferred embodiment, which discusses "[t]he control sequence that takes place when *a* User initiates a channel play operation" Col. 14, ll. 13-14 (emphasis added). Figure 8A illustrates the control process described in the preferred embodiment. Col. 14, ll. 13-62. The routing control process is the same for each user that sends a signal. See also Versa Corp. v. Ag-Bag Int'l. Ltd., 392 F.3d 1325, 1330 (Fed. Cir. 2004) ("[T]he use of 'channels' in the plural does not imply that multiple channels are required by the claim. In Dayco Products, Inc. v. Total Containment, Inc., we recognized that, in context, *the plural can describe a universe ranging from one to some higher number*, rather than requiring more than one item. 258 F.3d 1317, 1328 (Fed. Cir. 2001)." (emphasis added)).

AT&T cites Claim 19, which reads:

A method for transmitting at least one stream of audio and/or visual information over a communications network to a plurality of users comprising the steps of:

controlling the routing of the stream of information through the network in response to selection signals received from the users . . .

'187 Patent, Claim 19. AT&T argues that because "plurality" is more than one, that "selection signals received from the users" refers back to "plurality," i.e., more than one user. Again, the plural language does not exclude the possibility of one user initiating a signal. To so hold would ignore the preferred embodiment set out in the specification. See Vitronics, 90 F.3d at 1583 (a construction that excludes the preferred embodiment "is rarely, if ever, correct and would require

highly persuasive evidentiary support”).

The Court adopts TWM's constructions.

C. Terms Relating to Monitoring & Record Keeping

1. “monitoring the reception”

a. “monitoring the reception of packets by the users” ('187: Claims 1, 49; '005: Claims 1, 65, 67)

TWM: No construction required, or in the alternative: “Checking or observing whether the users are receiving the packets.”

AT&T: “observing whether users have or have not received the packets of the routed ‘stream’”

b. “monitoring the reception of the stream of information by the users” ('187: Claims 19, 50; '005: Claims 25, 66, 68)

TWM: No construction required, or in the alternative: “checking or observing whether the users are receiving the stream of information”

AT&T: “observing whether users have or have not received the routed ‘stream’ of information”

"Monitoring" is a common and well-understood term in the English language. Webster's defines "monitor" as: "3: to watch, observe, or check esp. for a special purpose . . . 4: to keep track of, regulate, or control . . .— used esp. of an automatic electronic device." WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY at 1460 (1976). The specification provides no basis for deviating from the ordinary meaning. The specification explains that “monitoring the reception of packets” is performed in the preferred embodiment by an electronic “ping object.” Col. 14, ll. 57-63. Media Servers send ping objects to a user's computer on a periodic basis to determine if the computer is still working and active. *Id.* If the user's computer returns the ping object, the system knows that the computer is receiving packets. If the user's computer has

terminated, the ping objects are not returned and the system knows that the computer is no longer receiving the stream of packets. Id.

AT&T quotes the full claim limitation ("monitoring the reception of packets by the users and accumulating records that indicate which streams of packets were received by which users") and argues that " '[m]onitoring the reception' therefore refers to acquiring the information necessary to accumulate records as further specified in the claim." AT&T Brief at 25. The Court does not agree. "[M]onitoring the reception of packets by the users" and "accumulating records that indicate which streams of packets were received by which users" are two independent clauses describing two independent functions. As discussed above, monitoring the reception is done by the Media Server sending periodic ping objects to the user's computer to determine if it still receiving packets. Col. 14, ll. 57-63. Judge Head reached the same conclusion. Two-Way Media, 508 F. Supp. 2d at 533 ("The preferred embodiment monitors a user's reception of a stream using a PING message."). On the other hand, the Administration Server maintains audit logs and gathers statistics. Col. 3, ll. 41-50. The Administration Server gathers this information from the Media Servers and Control Servers. Col. 16, ll. 29-41. The information the Administration Server obtains from the Media and Control Servers is used for the purpose of assessing copyright royalties, col. 3 at ll. 47-50, and to control and monitor the delivery of advertising content to users, col. 16 at ll. 37-41. In summary, it is the Media Server that monitors whether the user's computer is receiving packets and the Administration Server that accumulates records from information received from the Media Server for such purposes as royalties and

advertising.¹¹

The Court adopts TWM's constructions.

2. “monitoring the forwarding” (’622: Claim 1)

TWM: See construction of “forwarding” above. No further construction required, or in the alternative: “checking or observing the sending”

AT&T: “observing the forwarding”

For the reasons discussed in the preceding section, the Court adopts TWM's construction.

3. records relating to reception

a. “accumulating records that indicate which streams of packets were received by which users” (’187: Claims 1, 49; ’005: Claims 1, 65, 67)

TWM: No construction required: See constructions for “users,” “streams of packets” and “stream(s) of addressed digital packets”. In the alternative: “gathering information that indicates which streams of packets were received by which users”

AT&T: “storing data identifying each routed ‘stream’ that each user received”

b. “accumulating records relating to the reception of the stream of information by the users” (’187: Claims 19, 50; ’005: Claims 25, 66, 68)

TWM: No construction required, or in the alternative: “gathering information relating to the reception of the stream of information by the users.”

AT&T: “storing data identifying each routed ‘stream’ of information that each user received”

¹¹ See also, Col. 15, ll. 5-13:

The initiation of the audio stream by the Media Server causes a log entry to be generated and sent to the Administration Server. This information is important so that the Administration Server can update its database to indicate which Users are listening to which channels. The security token is used to identify the User initiating the audio stream. Additionally, when the audio stream is terminated to any User, another log message is generated and sent to the Administration Server.

The same arguments are presented here as have already been discussed in section II.A.5. above. Again, AT&T argues that the claims' terms require accumulating all information about every user. AT&T argues that the claim language mandates this requirement for two reasons—the ordinary English meaning of the non-technical terms, and in order to use the data accumulated to determine monies owed to copyright holders and billing for delivering advertisements. TWM argues that

the claims themselves specify the streams for which records must be accumulated. Claims 1 and 49 of the '187 Patent require “a plurality” of streams to “one or more” users. Claims 19 and 50 of the '187 Patent and claim 66 of the '005 Patent require “at least one” stream to “a plurality” of users. Claims 1, 25, 65, and 68 of the '005 Patent require “at least one stream” to “one or more” users. . . . [A]s long as records are accumulated about the recipients of “a plurality” of streams or “at least one” stream, as the claims specify, the claim requirements have been met.

TWM Brief at 32-33.

Claim 1 of the '187 patent is representative of the “which streams/which users” language to be construed.

1. A method for transmitting message packets over a communications network comprising the steps of:

converting a plurality of streams of audio and/or visual information into a plurality of streams of addressed digital packets complying with the specifications of a network communication protocol,

for each stream, routing such stream to one or more users, controlling the routing of the stream of packets in response to selection signals received from the users, and

monitoring the reception of packets by the users and *accumulating records that indicate which streams of packets were received by which users*, wherein at least one stream of [packets] comprises an audio and/or visual selection and the records that are accumulated indicate the time that the user stops receiving the audio and/or visual selection.

'187, Claim 1 (emphasis added). The "accumulating records" language to be construed speaks to the function of the Administration Server, which has been described in section II.A.5., above.

"[W]hich streams of packets were received by which users" is identical to the phrase construed in that previous section of this order. For the reasons set out in the previous section, the Court finds that a similar construction is required here.

Dependent claims 12, 13, and 17 of the '187 Patent support this construction:

12. The method of claim 1 wherein at least one stream of packets comprises copyrighted music selections and the records that are accumulated indicate *how many* users received *specific* music selections.

13. The method of claim 1 wherein at least one stream of packets comprises music selections and the records that are accumulated indicate *how many* users did or did not listen to the entire selection.

17. The method of claim 1 wherein at least one stream of packets comprises copyrighted music selections and the records that are accumulated indicate *which* users received *specific* music selections.

'187, Claims 12, 13, 17 (emphasis added). See Phillips, 415 F.3d at 1314-15 ("Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term."). These dependant claims do not describe a general hit-or-miss or sporadic record keeping that monitors some streams to some users, but rather a record-keeping precision that reveals specific numbers of users that listened to specific music selections (or parts of specific selections), and even more precisely, "*which* users received *specific* music selections." Of course, this precision is what the preferred embodiment demands because the patents describe a system of accumulating records for the purposes of billing advertisers for ads delivered and paying royalties to copyright holders for performances of copyrighted material. The specification describes these functions as "critical." Col. 3, l. 44.

Such payments and billings require precision, not the monitoring of some streams to some users.

The Court adopts AT&T's constructions.

4. "start," "stop," and "elapsed" times

a. "the records that are accumulated indicate the time that a user starts receiving the audio and/or visual selection" (187: Claims 1, 19; '005: Claims 1, 25)

TWM: No construction required; See constructions for "accumulating records that indicate which streams of packets were received by which users," and "audio and/or visual selection."

In the alternative: "The information that is gathered indicates when the user began receiving the audio and/or visual content of the stream selected by the user"

AT&T: "data identifying the clock time that the routed 'stream' representing the user selected audio and/or video selection starts arriving"

b. "the records that are accumulated indicate...the time that a user stops receiving the audio and/or visual selection" (187: Claims 1, 19)

TWM: No construction required; See constructions for "accumulating records that indicate which streams of packets were received by which users," and "audio and/or visual selection."

In the alternative: "The information that is gathered indicates when the user stopped receiving the audio and/or visual content of the stream selected by the user"

AT&T: "data identifying the clock time that the routed 'stream' representing the user selected audio and/or video selection stops arriving"

c. "the records that are accumulated indicate the elapsed time that a user received the audio and/or visual selection" (187: Claims 49, 50)

TWM: No construction required; See constructions for "accumulating records that indicate which streams of packets were received by which users," "the elapsed time that a user received," and "audio and/or visual selection."

In the alternative: "The information that is gathered indicates the amount of time between the start of receipt of the audio and/or visual content of the stream selected by the user and end of receipt by the user"

AT&T: "data identifying the amount of clock time during which each user received each routed 'stream' representing the user selected audio and/or visual content"

AT&T attempts to insert language not mentioned in or supported by the claims or specification. We have discussed above how records are generated by the Media and Control Servers and accumulated by the Administration Server. See Col. 15, ll. 5-13 ("The initiation of the audio stream by the Media Server causes a log entry to be generated and sent to the Administration Server."); col. 16, ll. 30-32 ("[The statistics request sequence] is used by the Administration Server to gather information from the Media Servers and Control Servers in order to manage the overall system."); col. 3, ll. 41-44 (describing "times" for User listening); col. 16, ll. 34-37 (referring to "time" for User listening). Each of the independent claims of the '187 and '005 Patents requires records that "indicate" times associated with certain events regarding the users' receipt of streams. The records that indicate when a stream starts and stops, or its duration correspond to when the Media Server starts or stops sending the stream, or the length of time that it sends the stream. The streams, however, take some small amount of time to travel over the network from the Media Server to the user. Consequently, the times that a user actually starts or stops receiving the stream, or the time during which the user receives the stream, will differ—if only slightly—from the times recorded at the Media Server. In other words, the preferred embodiment does not record "actual" start and stop times, much less require those times.

There is nothing in the patents that speaks of "identifying . . . the clock time" or mandates that level of precision. The verb used in the claims is "indicate." The Oxford dictionary defines it as: "1. To point out, point to, make known, show (more or less distinctly). . . . 4. To state or express, esp. to express briefly, lightly, or without detail or development; to give an indication of." OXFORD ENGLISH DICTIONARY (2d ed. 1989; online version March 2011). The Court must assume that this imprecision was deliberate given the preferred embodiment as described above

and therefore rejects AT&T's construction.

While TWM's proposed constructions accurately restate the language of the claims, the Court believes such a restatement is unnecessary given the clarity of the claims' language.

Therefore, the Court finds no construction is necessary.

5. "determining an extent of said real-time media stream forwarded" ('686: Claims 1, 26, 33)

TWM: See construction above of "real-time [information.]" See construction above of "stream[(s) of addressed digital packets]." See construction above of "forwarding" "duration or size of the real-time media stream forwarded."

AT&T: "the amount of data comprising the real-time media stream forwarded to a user device"

The dispute here is whether the term "extent," which both sides agree refers to the amount of the data, also encompasses the duration of the data. Claim 1 of the '686 Patent covers a method of "metering real-time streaming media," including the steps of:

- (a) forwarding a real-time media stream . . .
- (b) detecting a termination of said forwarding; [and]
- (c) determining an extent of said real-time media stream forwarded toward said user device after said termination . . .

Two dependent claims demonstrate that "extent" is a measurement of the duration of the real-time media stream:

- 5. The method of claim 1, wherein said determining further comprises ascertaining a duration of said real-time media stream forwarded toward said user device.
- 7. The method of claim 1, wherein said determining further comprises ascertaining the size of said forwarding.

'686 Patent, Claims 5 & 7. As reflected in these dependent claims, both "duration" and "size" are

specific measures of the “extent” of the real-time media stream forwarded to a user. The specification is in accord, describing, for instance, that duration statistics are maintained by the Administration Server “to monitor which Users are listening to which channel or whether Users stop listening to a channel at any time, such as during the play of a particular song.” Col. 16, ll. 35- 37; see also col. 3, ll. 41-44, col. 15, ll. 5-14.

The Court adopts the following construction: determining the duration or size of the real-time media stream forwarded.

6. miscellaneous record keeping terms

a. “times at which any of the available channels were received” (’153: Claims 114, 117)

TWM: No construction required

AT&T: “every time at which every user computer received any available channel”

b. “which of the available channels were received” (’153: Claims 114, 117)

TWM: No construction required

AT&T: “every available channel received by every user computer”

c. “which user computers received the audio information” (’153: Claim 114)

TWM: See construction below of “user computers.” No further construction required

AT&T: “every user computer that received any amount of audio information”

d. “how many user computers received the audio information” (’153: Claim 117)

TWM: See construction below of “user computers.” No further construction required

AT&T: “the number of user computers that received any amount of audio information”

This brings us back to the “each” and “every” dispute previously discussed. (See Sections

II.A.5. and II.C.3. above.) TWM contends that no construction is required because the claims are clear on their face and accuses AT&T of trying to rewrite the claims. AT&T argues that the language of the claims demands AT&T's construction because, for instance, the claim that requires recording the "times at which any of the available channels were received" means recording all the times at which every user computer received any channel. Otherwise, recording only some times that some user computers received some channels does not tell one the times at which any of the available channels were received.

The parties rehash the same arguments they have used previously, but neither discusses the claims in context. The claims to be construed here are different than the previously discussed claims that related to the control architecture of the invention. Here, the claims to be construed describe the user interface functions of the invention.

Claim 114 is similar to Claim 117 and reads as follows:

114. A system for streaming audio over a communications network, the system comprising:

at least one server configured to transmit a continuous sequence of packets containing audio information, wherein the continuous sequence of packets is transmitted at approximately the same time to each of multiple user computers;

a software application configured to be loaded onto each of the user computers, wherein the software application contains instructions for generating a user interface comprising:

a channel guide that includes a list of available channels of audio information; and

a program guide that provides program information for at least one of the available channels; and

at least one server configured to record *which user computers received the*

audio information, which of the available channels were received, or times at which any of the available channels were received.

'153 Patent, Claim 114 (emphasis added). The last paragraph of Claim 117 is slightly different:

generating a database that includes data indicative of how many user computers received the audio information, which of the available channels were received, or times at which any of the available channels were received.

'153 Patent, Claim 117.

The user interface is described in the specification:

The User interface is provided by the client application running on an individual computer and its associated graphical interface. . . . Preferably anyone on the Internet can freely download a copy of the client software and install it in their computer.

Col. 16, l. 64 - col. 17, l. 3. The software application discussed in the claims to be construed provides channel and program guides to users. The specification continues:

The information contained in the channel guide, program guide, and the tabs of the multimedia frame is dynamically transmitted to the client. For example, if a new channel begins operation, the client application can immediately display it as being available. Furthermore, the tabs displayed can be specifically relevant depending on what song is playing. For example, tabs displaying the album cover, information on the artist, song lyrics, tour dates can be displayed. Additionally, as shown in the example in FIG. 18, a tab can be available allowing the User to place an order for the CD or allowing the User to participate in a chat session related to the channel.

Col. 17, ll. 19-30; see also '153 Patent, Claims 115, 116, 118, 119 (the user interface generated by the software, in addition to providing the guides, allows users to order products and to participate in chat sessions).

The specification does not discuss a record-keeping function relating to the user interface aspects of the invention. It can be seen, however, that user interface does have commercial

purposes, such as permitting the users to order products such as music CDs and to generate interest in the music and artists by providing information including tour dates and permitting participation in chat sessions. The commercial purposes in the user interface do not relate to delivery of paid advertising and collection of royalties as they do in the control architecture. Moreover, the software application spoken of in the claims is not specific to individual users but provides general information to users relating to available channels and programs. Likewise, permitting users to purchase CDs and participate in chat sessions does not demand records relating to the numbers of users selecting a particular channel. Thus it would seem that the same degree of precision in record keeping is not required for the user interface functions as it is for the control architecture.

The Court rejects AT&T's proposed constructions for these terms because neither the claim language nor the specification requires the precision AT&T's constrictions demand. The Court agrees with TWM that the claim language is clear and does not require any further explanation. The Court finds that the terms need no further construction.

7. "logging" and "metering" the "extent"

a. "metering real-time streaming media for commercial purposes" ('686: Claims 1, 26, 33)

TWM: See construction above of "real-time [information]." See construction above of "stream[(s) of addressed digital packets]." No further construction required, or in the alternative: "gathering statistics regarding real-time streaming media for reasons related to the operation of a business"

AT&T: "measuring the real-time streaming media for the purpose of determining the amount of money to be paid to or received from a third party"

b. "logging said extent for commercial purposes" ('686: Claims 1, 26, 33)

TWM: No construction required, or in the alternative: "recording said extent for reasons related to the operation of a business"

AT&T: "recording the extent forwarded for the purpose of determining the amount of money to be paid to or received from a third party"

At issue here is the meaning of "commercial purposes." TWM's construction defines the term as "reasons related to the operation of a business." AT&T proposes the term be construed as "determining the amount of money to be paid or received from a third party."

AT&T confines its argument to one commercial purpose—that of monitoring how much money is to be paid for commercial advertising and for royalty purposes. TWM argues that the commercial purposes in the patent are more varied. TWM cites a passage from the specification addressing commercial purposes.

Maintaining audit logs and gathering statistics are features critical to monitoring the *delivery of paid commercial messages* as well as for other purposes. For example, for purposes of *assessing copyright royalties*, the audit logs can record the number of listeners for each musical or video selection that is distributed in the system. Another application is to *determine the percentage of listeners who are interested in listening to a particular musical selection* by determining how many listen to the entire selection and how many turn it off.

Col. 3, ll. 44-54 (emphasis added). The passage addresses delivery of paid commercial messages but notes that other commercial purposes are contemplated. It then gives two examples of these other purposes: assessment of copyright royalties and evaluating user preferences, which, according to TWM, "allows a streaming business to enhance its content and improve the effectiveness of advertising to serve its audience and advertisers better." TWM Brief at 42-43; see also col. 16, ll. 29-41 (further discussion of monitoring user listening preferences). The evaluation of user preferences is obviously a commercial purpose, but it would be excluded by AT&T's restriction of "commercial purposes" to "determining the amount of money to be paid or

received from a third party."

The Court adopts TWM's constructions.

8. "detecting a termination of said forwarding" ('686: Claims 1, 26, 33, 34)

TWM: See construction above of terms incorporating "termination." See construction above of "forwarding." No further construction required. In the alternative: "detecting an event or condition associated with the termination of the forwarding"

AT&T: "discovering that the intermediate server stopped forwarding the real-time media stream"

Claim 1 of the '686 Patent states in pertinent part:

A method for metering real-time streaming media for commercial purposes, said method comprising:

forwarding a real-time media stream from an intermediate server toward a user device . . .

detecting a termination of said forwarding . . .

'686 Patent, Claim 1 (emphasis added).

TWM relies on Figure 8C of the specification and the explanatory text that describes the termination of the real-time media stream.

In the case of normal termination of the audio stream, the User makes an explicit selection to stop and this causes a STOP command to be sent to the Media Server in an MCI Request Object. The Media Server then terminates the audio stream to that User. When the User closes the application software or selects another channel to play, the User software will send a CLOSE command to the Media Server in an MCI Request Object and the TCP connection is closed.

Col. 14, l. 64 - col. 15, l. 4; see also Fig. 8C. TWM's argument is that the Media Server "detects" the user's stop command and then stops forwarding the stream. TWM Brief at 44 ("the Media Server receives a termination command from the user that, once detected, causes the Media Server to stop forwarding the stream"). This, however, does not explain who or what "detects"

that the media stream has terminated. In other words, the claim specifies that it is the termination of the forwarding of the stream that is detected, not the user's stop command. TWM argues that "no component described in the TWM Patents 'discovers' that the Media Server has stopped forwarding the media stream." Id. If this is so, then the claim language is superfluous. See Bicon, Inc. v. Straumann Co., 441 F.3d 945, 950 (Fed. Cir. 2006) (claims must be "interpreted with an eye toward giving effect to all terms in the claim"); Elektta Instrument S.A. v. O.U.R. Scientific Int'l, Inc., 214 F.3d 1302, 1305-07 (Fed. Cir. 2000) (refusing to adopt a claim construction which would render claim language superfluous).

AT&T argues that it is the Administration Server that detects the termination of the forwarding of the media stream. The Court agrees. AT&T relies on the paragraph in the specification immediately following the paragraph quoted by TWM.

Additionally, when the audio stream is terminated to any User, another log message is generated and sent to the Administration Server.

Col. 15, ll. 11-13; see also col. 16, ll. 35- 37 (the Administration Server gathers information "to monitor which Users are listening to which channel or whether Users *stop* listening to a channel at any time, such as during the play of a particular song.") (emphasis added). In other words, the Administration Server "monitors" ("detects") when users stop receiving media streams. As we have already discussed above, it is the Administration Server's function to gather information relating to the commencement and termination of streams to the users. Thus, while the Media Server may detect a "stop" *command* and execute it, it can only be the Administration Server that detects the *termination of the stream* when it receives the log message from the Media Server.

That the "detection" of the termination of the stream is done by the Administration Server

corresponds with the language in Claim 1 that occurs immediately following the "detecting" language. The next paragraph states: "determining an extent of said real-time media stream forwarded toward said user device after said termination . . .". '686 Patent, Claim 1. As construed in this Order in section II.C.5. above, "determining an extent" refers to the information-gathering function of the Administration Server, which it uses to "manage the overall system." Col. 16, ll. 29-31.

The Court finds that TWM's alternative construction is too expansive, covering functions other than the mere detection of the termination of the stream that the claim language specifies. The Court therefore adopts AT&T's construction.

D. Terms Relating to the User

1. "user" and "system" terms

- a. "user"** ('187: Claims 1, 7, 19, 25, 30, 49, 50; '005: Claims 1, 6, 15, 16, 24, 25, 34, 39, 40, 65, 66, 67, 68)

TWM: "an end user (human) and/or a computer associated with such end user"

AT&T: "humans that use the system"

- b. "user information"** ('005: Claims 24, 40)

TWM: No construction required, or in the alternative: "data about a user"

AT&T: "information about the human user of the system"

- c. "user computers"** ('153: Claims 114, 117)

TWM: No construction required, or in the alternative: "computers associated with end users (humans)"

AT&T: "general purpose programmable devices belonging to end-users that can run various end-user installed software"

d. "system-related information" ('005: Claims 24, 40)

TWM: No construction required. In the alternative: "data about the system"

AT&T: "information about the computer system that performs the claimed steps"

The parties here debate whether the term "user" is restricted to humans (AT&T) or also includes the human user's computer (TWM).

The term "user" appears throughout the patents. The patents refer to human users, *e.g.*, the user selecting a channel, the user issuing a stop command, and providing content adjusted in accordance with the identity of the individual user. At other times, the patents' references can only be to the user's computer. For example, the specification describes "the format and sequence of control messages that are exchanged among Users, Control Servers, Media Servers, Primary Servers, and the Administration Server." Col. 8, ll. 37-40. Again, "[i]t can also use this information to control the advertising content that is downloaded to a particular User in advance of receipt of regular audio programming and/or monitor the delivery of advertising to Users." Col. 16, ll. 37-41. Obviously, information can only be downloaded to a computer, not a human. The claims also require the "user" to receive packets ('187 Patent, Claim 1: "monitoring the reception of packets by the users") and store a stream of packets ('005 Patent, Claim 7). Humans do not receive or store packets; only their computers can do so. The Court agrees with TWM that "user" refers to both humans and their computers. Likewise, "user information" refers to information about either the end user or the end user's computer.

"User computer" clearly refers to the end user's computer. AT&T would add the requirements that the computer be a "general purpose computer" that can run "various end-user installed software." AT&T argues that its construction is compelled by the specification, which

states that in the preferred embodiment, "[t]he software running on the User computer is preferably programmed for a Windows 32-bit environment, so it will run on a Windows 95 or Windows NT computer. Alternatively, Macintosh and UNIX environments can be accommodated by other User software." Col. 11, ll. 41-45. AT&T also cites Claim 41 of the '622 Patent, which refers to a "programmable device" containing user software and states that the programmable device "comprises a personal computer, or a personal digital assistant, or a telephone, or a mobile phone, or a terminal device, or a television set-top box, or a game console." AT&T argues from this that a user computer is one type of programmable device distinct from the other devices recited in Claim 41. AT&T Brief at 48. TWM counters that the specification describes the preferred environment rather than a requirement, and that it is improper to import limitations from the preferred embodiment into the claims. See Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004) ("Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1327 (Fed. Cir. 2002)).

The specific claims under construction referencing "user computer" are 114 and 117 of Patent '153.¹² As can be seen, these claims speak only of user computers, not other

¹² The claims under construction are from the '153 Patent. Claim 114 has been quoted above in Section II.C.6. Claim 117 reads:

117. A method for streaming audio over a communications network, comprising the steps of:

transmitting a continuous sequence of packets containing audio

programmable devices. The software the claims speak of does not refer to any specific operating system, such as Windows, Macintosh, or UNIX. Rather, the "user computer" need only be a device capable of running a software application that contains instructions for generating the specified channel and program guides. The Court assumes that devices other than the "general-purpose computer" of AT&T's proposed construction are capable of running such software. This is especially so when, as here, TWM has not demonstrated a clear intention to limit the scope of its claims to such devices.

The term, "system-related information," appears alongside "user information" in Claims 24 and 40 of the '005 Patent ("wherein the records that are accumulated include user information and system-related information"). We have already construed "user information" to refer to information about either the end user or the end user's computer. Similarly, "system-related information" plainly refers to information about the system as a whole. AT&T argues that TWM's proposed construction gives "user information" the same meaning as "system-related

information, wherein the continuous sequence of packets is transmitted at approximately the same time to each of multiple user computers;

providing a software application configured to be loaded onto each of the user computers, wherein the software application contains instructions for generating a user interface comprising:

a channel guide that includes a list of available channels of audio information; and

a program guide that provides program information for at least one of the available channels; and

generating a database that includes data indicative of how many user computers received the audio information, which of the available channels were received, or times at which any of the available channels were received.

information." This is not the case. Because "system-related information" includes information about the whole system, it necessarily includes information about user computers. But the term "user information" is limited to information about the human user and his or her computer. Thus the terms are not identical.

The Court adopts TWM's construction of "user." To be more precise, the Court construes "user information" as follows: information about the human user of the system or information about the human user's computer. The Court adopts TWM's constructions of "user computers" and "system-related information."

III. Term Not Construed

a. "server" ('686: Claims 1, 26, 30, 33)

Since the original claim construction briefs were filed the parties have resolved several construction issues, and those have not been addressed in this order. The parties informed the Court that they agreed to a construction of the term "intermediate server" (Issue 37) among others. (Docket no. 288.) Subsequently, the parties informed the Court that construction of the term "server" (Issue 41) is also moot with respect to Patent '153, Claim 114. (Docket no. 317.) The parties indicated, however, that they still require construction of the "underlying meaning" of the term "server" with respect to Patent '686, Claims 1, 26, 30, and 33. *Id.* The referenced claims of the '686 Patent, however, all contain the term "intermediate server" rather than "server." The parties' resolution of the term "intermediate server" relates to these claims. (Docket no. 288.) At this point the Court is unsure what the parties are asking it to construe, *i.e.*, the "underlying meaning" of the word "server" in the term "intermediate server." The parties' briefing, prepared before these agreements, does not supply enlightenment as to the "underlying meaning" they

seek. Therefore, the Court will not construe "server" in this order.

If the parties still desire a construction of the term, they may file briefs setting forth their proposed construction of "server" and the Court will enter a supplemental construction order. TWM's brief will be due within two weeks of the entry of this order, AT&T's response is due two weeks after that, and TWM's reply is due one week after AT&T's response. The brief and response are limited to ten pages, and the reply is limited to five pages. Signature and certificate of service are not included in the page count. If the parties no longer desire a construction of the term, they shall notify the Court in a joint advisory within two weeks of the entry of this order.

IT IS SO ORDERED.

SIGNED this 14 day of July, 2011.



ORLANDO L. GARCIA
UNITED STATES DISTRICT JUDGE