

United States Court of Appeals for the Federal Circuit

02-1491

ACTV, INC. and HYPERTV NETWORKS, INC.,

Plaintiffs-Appellants,

v.

THE WALT DISNEY COMPANY,
AMERICAN BROADCASTING COMPANIES, INC., and ESPN, INC.,

Defendants-Appellees.

Kenneth W. Starr, Kirkland & Ellis, of Washington, DC, argued for plaintiffs-appellants. With him on the brief were David P. Swenson, Kannon K. Shanmugam, and Gregory F. Corbett. Of counsel was Robert G. Krupka, Kirkland & Ellis, of Los Angeles, California.

Matthew D. Powers, Weil, Gotshal & Manges LLP, of Redwood Shores, California, argued for defendants-appellees. With him on the brief were James W. Quinn, Steven D. Glazer, Steven J. Rizzi, and Beth A. Oliak, Weil, Gotshal & Manges LLP, of New York, New York.

Appealed from: United States District Court for the Southern District of New York

Judge Jed S. Rakoff

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DECIDED: October 8, 2003

Before LINN, Circuit Judge, FRIEDMAN, and PLAGER, Senior Circuit Judges.

LINN, Circuit Judge.

ACTV, Inc., and HyperTV Networks, Inc., (collectively “ACTV”) appeal an order of the United States District Court for the Southern District of New York, dismissing ACTV’s complaint after deciding, on motion for summary judgment, that The Walt Disney Company, American Broadcasting Companies, Inc., and ESPN, Inc., (collectively “Disney”) did not infringe the claims of U.S. Patent Nos. 5,774,664 (“the ’664 patent”), 5,778,181 (“the ’181 patent”), and 6,018,768 (“the ’768 patent”). ACTV, Inc. v. Walt Disney Co., 204 F. Supp. 2d 691, 693 (S.D.N.Y. 2002) (“Order”). Because we conclude that the district court erroneously construed various disputed claim limitations and further failed to properly consider infringement under the doctrine of equivalents, we vacate the district court’s grant of summary judgment in Disney’s favor and remand for further proceedings consistent with this opinion.

BACKGROUND

The present case concerns technology for the synchronization of television information with

information from the Internet. ACTV owns the '664, '181, and '768 patents-in-suit, which disclose and claim various aspects of this technology. Each of these patents issued from continuation-in-part applications that depend, ultimately, from a common parent application. As such, the written descriptions of the patents are, with some modifications, substantially the same.

The '181 patent specification discloses a system that “combines the rich visual capabilities of television with the vast resources of the Internet.” '181 patent, col. 3, ll. 39-41. As distinguished from a prior art system known as “InterCast,” which embedded Internet content within the video blanking interval (“VBI”) of an analog video signal, the system disclosed in the '181 patent uses the VBI merely to transmit an identifier known as a uniform resource locator (“URL”), specifying the location of content on the Internet. *Id.* at col. 2, ll. 9-64. The VBI is the short period of time when the electron beam of a television cathode ray tube is turned off and redirected back to the top left corner of the television screen in preparation for the display of the next image. Because video information is not being sent during this interval, the television may receive other data, such as closed-caption text. In the InterCast system, the Internet content transmitted during the VBI must be “stripped down” because the relatively short duration of the blanking interval limits the effective bandwidth available – thereby limiting the amount of information that may be sent. *Id.* at col. 2, ll. 53-57. In addition, InterCast requires special hardware both to embed the Internet content in the VBI and to extract the content once it is received by the end user. *Id.* at col. 2, ll. 57-61.

In contrast, the '181 system is “a much more flexible, but less complex system.” *Id.* at col. 2, ll. 65-66. The information sent by the '181 system is not the information content itself, but rather a short text string—a URL—that identifies and locates the content on the Internet. Thus, the system uses only a small amount of the VBI bandwidth and does not require specialized hardware to embed or extract the Internet content. *Id.* at col. 4, ll. 4-11. At the desired time and using the received URL, the '181 system uses certain programs to retrieve the desired content from the Internet. *Id.* at col. 5, ll. 9-12. In an alternative embodiment, as disclosed in the '664 patent, the system does not place URLs in the VBI, but instead, enables broadcasters to transmit to end users a “link file” containing a list of pre-scheduled URL Internet addresses. '664 patent, col. 3, ll. 41-67. In another embodiment, as disclosed in the '768 patent, the URLs are encoded within a digital video signal and received either by digital cable boxes or digital televisions. '768 patent, col. 9, ll. 36-42, col. 10, ll. 10-15.

ACTV initiated an action against Disney, asserting that Disney's Enhanced TV (“ETV”) system infringes claims 1-3 of the '664 patent; claims 1, 12, and 13 of the '181 patent; and claims 1, 3, and 19 of the '764 patent. Claim 1 of the '181 patent is illustrative of the asserted claims and recites, with disputed terms underlined:

1. A system for presenting integrated television programming and corresponding related Internet information segments obtained from Web sites on the Internet, the system comprising:

a means for receiving programming, wherein the programming contains a video signal, an audio signal and one or more uniform resource locators, wherein the uniform resource locators specify one or more Internet addresses of the information segments which relate specifically to the content of the video and audio signals of the programming;

a means for decoding, connected to the receiving means, the uniform resource

locators to determine the specified Internet addresses;

a controller means, connected to the decoding means, for interpreting the uniform resource locators;

a web browser, connected to the decoding means and the controller means, for sending message requests to specific Internet sites located at the Internet addresses corresponding to the uniform resource locators and consequently receiving the one or more requested Internet information segments residing at the determined Internet addresses, the browser retrieves the requested Internet information segments under the direction and control of the controller means; and

a display means, connected to the controller and receiving means, for presenting the video and audio signals concurrently with the Internet information segments;

whereby the Internet information segments are synchronized to the video signal and displayed at predetermined times during the program.

Each of the claims asserted by ACTV includes at least: (1) a means for receiving a URL; and (2) a means for decoding the URL. Each asserted claim, except for claim 3 of the '664 patent, also contains a means for interpreting the URL.

On March 13, 2002, the district court issued a Markman Memorandum detailing its construction of thirteen disputed claim terms. ACTV, Inc. v. Walt Disney Co., 204 F. Supp. 2d 650 (S.D.N.Y. 2002) (“Markman Memorandum”). The district court noted that all of the asserted claims are drafted with certain limitations in means-plus-function format as defined in 35 U.S.C. § 112, ¶ 6. Id. at 652. Although the district court did not explicitly identify the functions associated with each of the means-plus-function claim limitations, it identified a general function of the claims as “synchroniz[ing] video and TV programming with web pages . . . in ways corresponding to the kinds of structures described in the [specification.]” Id. The district court construed the functional terms of two of the means clauses—namely the “decoding” and “interpreting” clauses. The district court construed “decoding” as the “extraction or retrieval of data from any data stream – not necessarily a video or audio signal – based on a predetermined format or encoding stream.” Id. at 655. It construed “interpreting” as “any kind of analyzing and translating utilized to enable the browser to effectively retrieve the relevant Web page.” Id. at 656.

Within the text of the “decoding” and “interpreting” (as well as “receiving”) clauses, the district

court construed “uniform resource locator,” or URL, as “the complete address of a site on the Internet specifying both a protocol type and a resource location.” Id. at 654. The district court determined that an address consisting of a protocol type (such as “http://”) and a resource location (such as “www.fedcir.gov”) is known as an “absolute URL.” Id. It also determined that, in contrast, a URL consisting of less than a protocol type and resource locator is known as a “relative URL.” Id. The district court then concluded that the term URL, as contemplated by the patent, includes only absolute URLs. Id.

Relevant to the discussion that follows, the district court construed “Internet address” to mean “a particular host on the Internet, specified by a uniform resource locator that is unique to that host,” id., and “Internet information segments” to mean “parts into which information on the Internet is commonly divided, such as a Web page.” Id. at 653.

Based on the district court’s construction of the term “uniform resource locator” in the functional statements of the means-plus-function claim limitations, Disney moved for summary judgment, arguing that its ETV system transmits only file names, not absolute URLs. Because absolute URLs are not transmitted, the ETV system necessarily does not receive, decode, or interpret URLs as defined by the district court. In a very short memorandum order, the district court concluded that Disney’s ETV system does not perform the identical functions of the asserted claims, i.e., ETV does not receive or decode absolute URLs, and thus cannot literally infringe. Order, 204 F. Supp. 2d at 693. In addition, the court foreclosed recourse to the doctrine of equivalents for these limitations because “the presence of means to receive and to decode full Internet addresses is a fundamental difference between the two systems.” Id. Finding no infringement, either literally or under the doctrine of equivalents, the district court granted Disney’s motion for summary judgment and dismissed ACTV’s complaint. Id. ACTV appeals portions of the district court’s claim construction and its grant of summary judgment in favor of Disney. This court has jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (2000).

DISCUSSION

We review a district court’s grant of summary judgment de novo. Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1359 (Fed. Cir. 2000). We make an independent evaluation of whether the standards of summary judgment have been met. Id. Summary judgment is appropriate when there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986).

In answering the question of infringement, a court conducts a two-step analysis. Generation II Orthotics, Inc. v. Medical Tech., Inc., 263 F.3d 1356, 1363 (Fed. Cir. 2001) (“Gen II”). First, the claims are construed to determine their scope. Id. Second, a court determines whether the accused device falls

within the scope of the claims as construed. Id. Claim construction, the first step, is a question of law that this court reviews de novo. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). The determination of the claimed function and corresponding structure of a means-plus-function claim limitation is a question of law, reviewed de novo. Kemco Sales, 208 F.3d at 1360.

In construing a means-plus-function limitation drafted in accordance with § 112, ¶ 6, the recited function within that limitation must first be identified. Gen II, 263 F.3d at 1363. Then, the written description must be examined to determine the structure that corresponds to and performs that function. Id. When identifying the claimed function, this court has noted that § 112, ¶ 6 “does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim.” Id. Correctly identifying the claimed function is critical, because “an error in identification of the function can improperly alter the identification of the structure . . . corresponding to that function.” Id.

II

In the present case, neither party disputes that the receiving means, decoding means, and interpreting means claim limitations of the patents are written in means-plus-function form, as defined in 35 U.S.C. § 112, ¶ 6. ACTV argues that the district court construed the term URL too narrowly, as encompassing only absolute URLs. It thus contends that the district court erroneously restricted the receiving, decoding, and interpreting functions of the means-plus-function claim limitations. ACTV asserts that the term URL properly should be construed to encompass both absolute and relative URLs. Disney argues that the district court correctly considered the evidence and properly construed URL as encompassing only absolute URLs. If this court adopts ACTV’s broad interpretation of URL, Disney argues that summary judgment of non-infringement is still proper on the alternative ground that the district court misconstrued the decoding and interpreting means claim limitations.

As described above, claim 1 of the ’181 patent recites, inter alia, “a means for receiving . . . one or more uniform resource locators, wherein the uniform resource locators specify one or more Internet addresses of the information segments which relate specifically to the content of the video and audio signals of the received programming.” The decoding means limitation in this claim reads “means for

decoding . . . the uniform resource locators to determine the specified Internet addresses,” and the interpreting means claim limitation recites “a controller means . . . for interpreting the uniform resource locators.” Although the term URL appears in a slightly different context in the functional statement of each limitation, the district court determined that it had the same meaning throughout the asserted claims of all of the asserted patents. Because of this, the district court disposed of the case wholly on its construction and analysis of the term URL, concluding that this was “a simple issue that resolves the case.” Order at 2. We begin our analysis with the construction of this critical term.

A

First and foremost, the analytical focus of claim construction must begin, and remain centered, on the language of the claims themselves. Tex. Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1201-02 (Fed. Cir. 2002) (quoting Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001)). Because the claim language is chosen by the patentee to “particularly point[] out and distinctly claim[] the subject matter” of the invention, 35 U.S.C. § 112, ¶ 2, the claim terms chosen by the patentee carry a presumption that “they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art.” Tex. Digital, 308 F.3d at 1202. In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art. See, e.g., Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002). The ordinary and customary meaning of a claim term may be determined by reviewing a variety of sources, including the claims themselves, see Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357 (Fed. Cir. 1999); dictionaries and treatises, Tex. Digital, 308 F.3d at 1202; and the written description, the drawings, and the prosecution history, see, e.g., DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1324 (Fed. Cir. 2001). While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms. See Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1299 (Fed. Cir. 2003); Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed. Cir. 1999).

ACTV, in arguing that the ordinary and customary meaning of the term URL encompasses both

relative and absolute URLs, provides a document entitled Request for Comments 1808 (“RFC 1808”), from the World Wide Web Consortium (“W3C”), an industry working group, as authoritative support for this position. RFC 1808 discusses both absolute and relative URLs, noting that a relative URL “is a shortened form of that for [an] absolute [URL]” and that a relative URL is “a compact representation of the location of a resource.” In response, Disney offers an earlier document entitled Request for Comments 1738 (“RFC 1738”), from the same organization, in support of its argument that URL encompasses only absolute URLs. Specifically, RFC 1738 indicates that a URL has a typical syntax requiring both a protocol type and a resource locator. RFC 1738 also distinguishes between “relative links,” in which the expression of a related resource is described “in the same place as this one except with the following relative path,” and general URL syntax, which provides “an abstract identification of the resource location.”

As this court has previously noted,

[d]ictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art. Such references are unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation. Indeed, these materials may be the most meaningful sources of information to aid judges in better understanding both the technology and the terminology used by those skilled in the art to describe the technology.

Tex. Digital, 308 F.3d at 1202-03.

As a preliminary matter, we consider whether the RFCs presented by the parties rise to the level of unbiased, contemporaneous reflection of the common understanding of the technical terms in question as to be considered a reliable source of information on the meaning attributed to those terms by those skilled in the art. The purpose of the W3C organization is “to lead the World Wide Web to its full potential by developing common protocols that promote its evolution and ensure its interoperability.” About the World Wide Web Consortium (W3C), at <http://www.w3c.org/Consortium/> (last visited Aug. 7, 2003) (“W3C Website”). To this end, members of W3C (including various industry groups, manufacturers, and others, each with their own conceivable interests in the agenda) are involved in developing standards to describe the various building blocks of the Internet. *Id.* Both RFC 1738 and RFC 1808 are working papers generated during standardization discussions by one subset, or working group, within W3C. See, e.g., Uniform Resource Locators (RFC 1738), at <http://www.w3.org/Addressing/rfc1738.txt> (T. Berners-Lee et al. eds. Dec. 1994) (“This document specifies an Internet standards track protocol . . .”). The purpose of the RFCs is thus to collect commentary and to select language to facilitate a common understanding, or to select a standard, from a variety of competing technologies and vocabularies and from a variety of potentially competing interests. Indeed, the acronym “RFC” suggests that end: “Request for Comments.” This purpose is in sharp contrast to the role of dictionaries and treatises, which aim not to select or give meaning to a word

or phrase, but to report the meaning already established and commonly understood by those skilled in the art. See, e.g., Samuel A. Thumma & Jeffrey L. Kirchmeier, The Lexicon Has Become a Fortress: The United States Supreme Court's Use of Dictionaries, 47 Buff. L. Rev. 227, 291 (1999) (stating that first resort to a dictionary may be appropriate in determining meaning because "dictionaries are designed to reflect usage." (emphasis added)).

Both parties offer these RFC documents as authoritative, unbiased sources relating to the meaning of the expression URL. Because the RFCs were not designed to reflect common usage, but rather to assign language to facilitate further conversation, and because of the seeming contradictions between RFC 1738 and RFC 1808, we conclude that both documents are extrinsic evidence, and in light of the discussion below, we decline to rely on them in our claim construction analysis. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("[If] an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term . . . it is improper to rely on extrinsic evidence."). It should be understood, however, that there is no general prohibition on the use of publications from standards-setting organizations to aid in determining the ordinary and customary meaning of technical terms. Where such a document reflects common usage by those skilled in the relevant art, the document may indeed be an appropriate reference. Where, as in this case, the documents of the standards-setting organizations do not reflect common usage, but purport to select language to be used in the future, elevation of these Requests for Comments to the same authoritative, unbiased level as dictionaries is improper.

In the present case, the construction of URL is principally informed by the plain language and surrounding context of the claims themselves. See Brookhill-Wilk, 334 F.3d at 1299. The claims recite that a URL "specif[ies] one or more Internet addresses of the information segments which relate specifically to the content of the video and audio signals of the programming." '181 patent, col. 59, ll. 8-12 (emphasis added). In construing the claim term URL, these additional terms contained in the claimed means-plus-function expressions provide context for the term URL and must themselves be construed. See, e.g., Hockerson-Halberstadt, 183 F.3d at 1374 ("Proper claim construction, however, demands interpretation of the entire claim in context, not a single element in isolation."). Thus, even though the district court's constructions of "Internet address" and "information segments" were not explicitly appealed, we must also construe those terms to properly construe the appealed term URL.

The district court's construction of "information segments" as "simply refer[ring] to parts into which information on the Internet is commonly divided" is supported by the claim language and the specification. See Markman Memorandum, 204 F. Supp. 2d at 653; '181 patent, col. 3, l. 6, col. 6, l. 12; '664 patent, col. 3, l. 31, col. 8, l. 32; '768 patent, col. 3, l. 33, col. 8, l. 55. These parts are exemplified by, but not limited to, items such as web pages, audio clips, and images. See id. However, the district court's construction of the term "Internet address," as "a particular host on the Internet, specified by a uniform resource locator that is unique to that host," Markman Memorandum, 204 F. Supp. 2d at 654, is

not supported by the claim language or specification, and relies on circular reasoning related back to URL. Rather, the context of the term “Internet address” informs that it is simply a reference to a location of the information segment on the Internet. There is no support for the district court’s added requirements that the “Internet address” be a particular host or that it be unique. A URL, then, as defined by the language and context of the claims, is something that identifies the location of relevant information segments. This can include web pages, audio clips, images, and the like. It can be an absolute URL or a relative URL, as long as it specifies one or more Internet addresses of information segments relating to Internet content.

B

The written description must also be examined, because it is relevant to aid in the claim construction analysis, e.g., to determine if the presumption of ordinary and customary meaning is rebutted. See Renishaw PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998). The presumption will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth a definition of the term different from its ordinary and customary meaning. See In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994); Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387-88 (Fed. Cir. 1992). The presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope. See Teleflex, 299 F.3d at 1324.

Both parties agree that the patents’ written descriptions do not explicitly define URL, and thus, that the patentee has not set forth a definition of URL to instruct our analysis. However, each party draws different inferences about the breadth of the term from the use of URL in context. ACTV argues that the written descriptions do not limit the use of the term to only absolute URLs. For example, the abstract of the ’181 patent refers to URLs as “the effective addresses of locations or Websites on the Internet.” ’181 patent, Abstract. Disney argues, however, that because the only examples in the written descriptions use absolute URLs, and because the client software, as disclosed, is only functional when receiving and decoding absolute URLs, then ACTV has disclaimed coverage of anything but absolute URLs. After careful review of each of the patents’ written descriptions, we note that they do not contain an indication of the patentee’s clear intent to limit the term URL to something less than the scope of the plain language. Instead, the abstract of each patent describes URLs as “the effective addresses of locations or Web sites on the Internet.” Likewise, in the summary of the invention, the specification refers generally to URL as “the relevant Internet Web page addresses.” ’664 patent, col. 3, ll. 28-29. Finally, in a preferred embodiment, the patentee describes URLs as “direct[ing] the user’s computer 16

to address locations, or Web sites, on the Internet 20 to retrieve related Web pages.” *Id.* at col. 4, ll. 32-35. In all, these are general statements that are consistent with a broad construction of the claim terms—the URLs merely specify the location of segments of Internet information. Moreover, as this court made clear in *Teleflex*, the existence of a single embodiment in the written description does not necessarily constrain the scope of the claims. 299 F.3d at 1328. Where the written description does not expressly limit the claim term and otherwise supports a broader interpretation, “we are constrained to follow the language of the claims,” *id.*, and give the claim term its full breadth of ordinary meaning as understood by persons skilled in the art. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001). Because the written descriptions of the patents lack an indication of the patentee’s clear intent to limit the term URL to absolute URLs, and because the written descriptions further support a broader interpretation, we decline to impose such a limit.

C

Both parties disagree as to the significance of prosecution history on the proper scope of the claims. The prosecution history must be considered because it may demonstrate that a patentee intended to deviate from a term’s ordinary and customary meaning or that the patentee disclaimed or disavowed subject matter, narrowing the scope of the claim terms. *See, e.g., Teleflex*, 299 F.3d at 1326.

During prosecution of the applications that issued as the ’181 and ’664 patents, the patentee responded to an anticipation rejection in light of U.S. Patent No. 5,589,892 (“Knee”) by stating:

[t]he so-called resource locators disclosed in Knee provide information about a product or service, they do not provide a uniform resource locators (URL) which are addresses designated [sic] Web sites. Further, Knee does not disclose a “means for decoding . . . the uniform resource locators to determine the specified Internet addressees,” as set forth in amended claims 5 and 6.

The Examiner states that Knee shows a means for extracting identification data for retrieving a user’s requested service. However, there is a fundamental difference between Knee and applicant’s invention. In Knee, the user site does not send a request to remote Web sites requesting information, as in applicant’s invention. Instead, all data feeds are received at some single location, such as a cable headend. In Applicant’s invention, on the other hand, Web page requests must be sent from each workstation to the Internet sites disclosed by the URL’s for the Internet information segments.

Based on this response, Disney argues that the patentee distinguished the claimed invention from Knee by invoking “uniform resource locators . . . which are addresses designat[ing] Web sites.” In doing so, Disney asserts that the patentee disclaimed any meaning of URL short of an absolute URL. ACTV

argues that these statements do not foreclose a broad construction of URL and that the Knee system is otherwise different from the claimed invention.

We agree with ACTV. Disney's argument is undermined by the specification of the Knee patent itself. Knee discloses a system where the VBI of an analog signal is encoded with information concerning a product or service associated with a program. Knee, col. 40, ll. 30-33. Knee defines this information as "a description of the product(s) or service(s), price, and any other information required." Id. at col. 39, ll. 45-47. In other words, Knee's specification clearly contemplates that the information embedded in the VBI is raw data used as filler for blank "screen formats." Id. at col. 41, ll. 10-15. Instead of limiting the term URL, the patentee distinguishes Knee from the claimed invention precisely because, in the ACTV invention, the VBI is not used to encode raw data. The contrast drawn by the patentee is between raw data and a method of identification, and not between different methods of identification, i.e., relative versus absolute URLs. Thus, we conclude that the prosecution history does not inform a definition other than the ordinary and customary meaning of the term URL, and further, does not disclaim or disavow any interpretation of the term URL. See, e.g., Teleflex, 299 F.3d at 1326.

For the foregoing reasons, we hold that the district court erred in construing the term URL to encompass only absolute URLs. The district court thus improperly adopted functions for each means-plus-function limitation different from that explicitly recited in the claim. See Gen II, 263 F.3d at 1363. Instead, we hold that the term URL, as recited in the claims of the '664, '181, and '768 patents, means a reference identifying the location of information segments, such as web pages, audio clips, images, and the like. The URL need not be an absolute URL, so long as it provides sufficient information for the system to identify a relevant information segment, which need not be unique. The district court found that Disney's ETV system "transmits the much more limited file names that identify specific information stored on one of two Disney origin servers," Order at 3, and the system then accesses the Disney sites to obtain the specified information. Id. Thus, we conclude that the file names transmitted by the ETV system fall within the scope of the term URL, as properly construed.

III

Disney urges us, upon determining that a broader definition of URL is correct, to find that the

district court erroneously construed the terms “interpreting” and “decoding,” and, thus, to affirm the grant of summary judgment on that basis. In particular, Disney argues that the district court ignored the ordinary meanings of these terms, accepted definitions contrary to the patents’ written descriptions, and failed to identify the corresponding structures. While we disagree that the district court erroneously construed the terms “interpreting” and “decoding,” we agree with Disney that the district court did not identify the corresponding structures. Therefore, we remand to the district court to determine the structures associated with the functions based on the above definition of URL and the district court’s otherwise proper claim constructions of the terms “interpreting” and “decoding.”

IV

A

We further hold that the district court erred as a matter of law in foreclosing application of the doctrine of equivalents in this case. The district court foreclosed application of the doctrine of equivalents to claim limitations written in means-plus-function format, Order, 204 F. Supp. 2d at 693, concluding that

the presence of means to receive and decode full Internet addresses is a fundamental difference between the two systems and goes to the heart of what makes ACTV’s system a novel, useful, and patentable invention[, sic] especially in comparison with prior closed systems like Knee or subsequent closed systems like Disney’s.

Id.

As an initial matter, the district court characterized the claimed invention as “global in its reach and methods” and the accused infringing system as “closed” because it “transmits much more limited file names that identify specific information stored on one or two Disney origin servers.” Id. at 692. Although each system may differ in overall scope and purpose, both parties agree before this court that the claimed system and the accused system utilize the same basic telecommunications infrastructure, the Internet. In that regard, both systems are “open” and not “closed” systems as the underlying end-to-end infrastructure of the Internet requires a user’s computer to distinguish and select from multiple remote servers.

Based on its conclusion that there was a fundamental difference between the claimed system and the accused system, the district court barred application of the doctrine of equivalents to the receiving

means and decoding means limitations. Id. at 693. The district court relied on this court's reasoning in SciMed Life Systems v. Advanced Cardiovascular Systems, 242 F.3d 1337, 1364 (Fed. Cir. 2001). In SciMed, we concluded that, "[h]aving specifically identified, criticized, and disclaimed the dual lumen configuration [for a balloon dilation catheter], the patentee cannot now invoke the doctrine of equivalents to 'embrace a structure that was specifically excluded from the claims.'" Id. at 1345 (quoting Dolly, Inc. v. Spalding & Evenflo Cos., 16 F.3d 394, 400 (Fed. Cir. 1994)). Our reasoning in SciMed is inapposite to the present case. In SciMed, by using the specification to define the claim in a way that clearly excluded certain subject matter, the patentee disclaimed the subject matter and was thereby barred from asserting infringement under the doctrine of equivalents. Id. at 1346. In this case, the patentee has not implicitly or explicitly disclaimed any subject matter by using the expression "uniform resource locator" as that expression is correctly construed. Therefore, we conclude that application of the doctrine of equivalents is not barred simply for that reason.

B

Although the analyses of insubstantial difference are similar, a court must conduct a separate infringement analysis under the doctrine of equivalents after conducting an analysis of literal infringement for claim limitations written in means-plus-function format if both literal infringement and infringement under the doctrine of equivalents are asserted. Apex Inc. v. Raritan Computer, Inc., 325 F.3d 1364, 1378 (Fed. Cir. 2003). For a limitation written in means-plus-function form, evidence and arguments concerning equivalents under § 112, ¶ 6 may substantially overlap with those concerning the doctrine of equivalents. However, the evidence and arguments concerning the two "types" of equivalents, and their respective analyses, are by no means perfectly coextensive. See, e.g., Kemco Sales, Inc., 208 F.3d at 1364-65.

On remand, the district court should entertain ACTV's allegations of literal infringement and infringement under the doctrine of equivalents, consistent with this opinion and the precedents of this court.

CONCLUSION

For the above-stated reasons, we vacate the district court's grant of summary judgment of non-infringement in favor of Disney and remand for further proceedings consistent with this opinion.

VACATED AND REMANDED.

COSTS

No costs.