

United States District Court,
S.D. New York.

ACTV, INC. and HyperTV Networks, Inc,
Plaintiffs.

v.
The WALT DISNEY CO., ABC, Inc., and ESPN, Inc,
Defendants.

No. 00 CIV. 9622(JSR)

May 14, 2002.

Owners of patents for system for synchronizing television or video programming with related Internet programming sued television network for infringement. Construing claims, the District Court, Rakoff, J., held that: (1) received "programming" meant data stream containing video signals, audio signals, and/or uniform resource locators; (2) "decoding" meant extraction or retrieval of data from any data stream, based on predetermined format or encoding scheme; (3) connection between web browser and decoding means did not have to be physical; (4) "member broadcaster" meant any of plurality of distinguishable television broadcast organizations authorized to access member account so as to synchronize sending out of URLs with associated television programs; and (5) "service web site" meant site through which broadcasters were provided member accounts and authorized to enter information that would allow them to synchronize transmission of URLs to particular television.

Claims construed.

5,774,664, 5,778,181, 6,018,768. Construed.

MEMORANDUM

RAKOFF, District Judge.

In this action, plaintiffs ACTV, Inc. and HyperTV Networks, Inc. (collectively, "ACTV"), the owners and exclusive licensees of U.S. Patents 5,778,181 (the " '181 patent"), 5,774,664 (the " '664 patent") and 6,018,768 (the " '768 patent") assert that defendants the Walt Disney Company, ABC, Inc., and ESPN, Inc. (collectively, "Disney") have infringed and continue to infringe each of the three named patents. In early October, 2001, the Court held a three day "Markman" hearing to address issues of patent claim construction, *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), and in late October, 2001, the Court issued two orders defining thirteen of the key terms in dispute. *See Order*, October 26, 2001; *Supplemental Order*, 01 Civ. 9622, October 31, 2001. This Memorandum briefly elaborates the reasons for these determinations.

The three patents here in issue describe a system for synchronizing television and/or video programming with related Internet programming available at specified sites on the World Wide Web. In the first preferred embodiment, illustrated in Figure 1 of all three patents, a uniform resource locator ("URL") is embedded into the vertical blanking interval ("VBI") of the video signal and transmitted directly to the user's personal computer. At the user site, a decoder extracts the URL from the VBI, and then the user's personal computer, through use of a JAVA-enabled browser, retrieves the relevant web page to be shown simultaneously with the video or television programming. In the second preferred embodiment, illustrated in Figure 2 of all three patents, the URL decoder, located at the server site, sends the decoded URL code to the user site separately from the video or television programming. In the third preferred embodiment, illustrated in Figure 4 of patents '664 and '768, the URLs are never encoded into the VBI at all, but sent directly to the user's software program. In this embodiment (not included in patent '181), a system is set up by which TV broadcasters can pre-schedule URLs for transmission to users, so that the synchronization is still achieved.

As an initial matter, it should be noted that all of the disputed claims in this case are drafted in a "means plus function" format, that is, each element of each claim is described as a "means or step for performing a specified function." 35 U.S.C. s. 112, para. 6. A claim so expressed "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." *Id.*

In construing such a claim, therefore, the court must first identify the particular function claimed, and then, in that light, identify the corresponding structure. *See Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376 (Fed.Cir.2001). Only by so doing can a court arrive at a definition of disputed terms that is neither so narrow that it would preclude the patentee from carrying out the functions and utilizing the associated structures described in the specifications, nor so broad as to imply a function well beyond the scope of that which could be performed by the specified structures or means. *See Valmont Indus., Inc. v. Reinke Mfg. Co., Inc.*, 983 F.2d 1039, 1042 (Fed.Cir.1993). Here, the function is to synchronize video and TV programming with web pages, not in every way possible but in ways corresponding to the kinds of structures described in the claims and illustrated, for example, by Figures 1, 2, and 4. All of this, moreover, is to be construed from the perspective of one with ordinary skill in the art at the time of the invention—here, one skilled in computer programming and possessing an understanding of computer networks as of 1996 or thereabouts. Finally, of course, all these perspectives are only relevant within the framework of the language of the claims themselves, the specifications thereunder, and the prosecution history. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed.Cir.1996).

The claims here to be construed are claims 1, 12, and 14 of the '181 patent, claims 1, 2, and 3 of the '664 patent, and claims 1, 13, and 19 of the '768 patent. However, only certain terms of these claims are in dispute. For example, claim one of the '181 patent contains the following disputed terms (in boldface):

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 determining 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.

Overall, the Court concludes that there are thirteen disputed terms that need to be defined in order to provide an adequate basis for construing the claims here in issue. The first nine will be considered in the order they appear in above-quoted claim, followed by the other four.

1. "programming" ('181 patent, *claim 1*, '664 patent, *claims 1 and 3*, '768 patent, *claims 1 and 19*)

[1] While both sides are agreed that the term "programming" as used in the claims here in issue refers to a data stream containing signals, defendants argue that it specifically here refers, more narrowly, to a single integrated data stream that contains a video signal, an audio signal *and* one or more URLs, while plaintiffs argue that it refers, more broadly, to a data stream containing video signals, audio signals, *and/or* uniform resource locators, with no requirement that all the signals be contained in a single data stream. Plaintiffs' reading is the more natural one, and there is nothing in the function or structure of the patents that compels defendants' definition; on the contrary, such a construction would exclude the embodiment shown in Figure 4 of the '664 and '768 patents and described in the specification, as well as the means for receiving at the user's end as shown in Figure 2 and described in all of the patents in dispute. Accordingly, the Court rejects defendants' definition, *see Dow Chemical v. Sumitomo Chemical Co.* 257 F.3d 1364, 1378 (Fed.Cir.2001) (it is "well established that a claim construction that excludes a preferred embodiment is '*rarely, if ever, correct.*' ") (citation omitted), and accepts plaintiffs'.

2. "Internet information segments" ('181 patent, *claim 1*; '664 patent, *claims 1 and 3*, '768 patent *claims 1 and 19*)

[2] While here again defendants seek a narrow and hypertechnical definition of the term "Internet information segments," the specification in all three patents refers to various resources on the Internet, including audio clips, images, and Web pages. *See* '181 patent, col. 3, 1. 6, col., 6, 1.12; '664 patent, col. 3, 1. 31, col. 8, 1. 32; '768 patent, col. 3, 1.33, col. 8, 1. 55. The broad and straightforward language of the term, as further exemplified by the multiple examples in the specification, makes clear that this term simply refers to parts into which information on the Internet is commonly divided, such as a Web page.

3. "Web site" ('181 patent, *claim 1*; '664 patent, *claims 1 and 3*; '768 patent, *claims 1 and 19*)

[3] In everyday parlance, "Web" is a short-hand for the World Wide Web, which in turn is a specified subset of the Internet universe. Accordingly, a "Web site" is a location on the World Wide Web. Neither

plaintiffs nor their expert dispute that this is the ordinary definition, *see* transcript ("tr."), Oct. 5, 2001, at 91, but they nonetheless contend that "Web" is being used in the patents in a broader sense to mean the equivalent of the entire Internet. Aside from the fact that the claims themselves do not expressly define "Web" in this unusual way, there is nothing in the function or structure of the claims that compels this unusual definition. By contrast, there is a "heavy presumption in favor of the ordinary meaning of claim language as understood by one of ordinary skill in the art." *Bell Atlantic Network Services, Inc. v. Covad Communications Group*, 262 F.3d 1258, 1268 (Fed.Cir.2001). Indeed, to adopt an unusual definition of the familiar term "Web" where the language of the patent did not expressly so define or otherwise compel such usage would undercut the public notice function of a patent. *See, e.g. Dayco Products Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1324 (Fed.Cir.2001).

4. "uniform resource locator" ('181 patent, *claim 1*; '664 patent, *claims 1 and 3*, '768 patent, *claims 1 and 19*)

[4] Based on the evidence presented at the "Markman" hearing, the Court specifically finds that, at the time the patents in suit were applied for, "uniform resource locator" meant the *complete address* of a site on the Internet, expressed in the conventional terms of a "protocol type" (such as "http://") followed by a more specific "resource location" (such as "www.nysd.uscourts.gov"). Indeed, both sides' experts effectively concede as much, *see* tr. Oct. 5, 2001, at 94 and 182. *See also* Pl.Ex. 13, RFC 1738, at 2. While it has also become common to sometimes designate the full address as an "absolute URL" and, where the protocol is known or assumed, to designate the specific resource location as a "relative URL," *see* Pl.Ex. 14, RFC 1808, at 1, the Court finds that the overwhelming bulk of the credible evidence indicates that at all times relevant those skilled in the art regarded the unqualified term "URL" or "uniform resource locator" to mean the full address, especially when employed in a carefully drafted document such as a patent claim.

That this is the usage here intended is further confirmed by the fact that the examples of URLs included in the patents here in issue depict the full addresses. *See, e.g.*, '768 patent, Fig. 7. Similarly, the code included in Appendix A of the patents is designed to work with "absolute" URLs and requires modification in order to handle "relative" URLs. *See* tr. Oct. 5, 2001, at 185-86. Accordingly, the Court concludes that, as used in these patents, the term "uniform resource locator" means the complete address of a site on the Internet specifying both a protocol type and a resource location.

5. "Internet address" ('181 patent, *claim 1*, '664 patent, *claims 1 and 3*, '768 patent, *claims 1 and 19*)

[5] From the foregoing determination it follows that an "Internet address," which the claims make clear is specified by a uniform resource locator, must therefore refer to a particular host on the Internet, specified by a uniform resource locator that is unique to that host.

6. "decoding" ('181 patent, *claim 1*; '664 patent, *claims 1 and 3*, '768 patent, *claim 1 and 19*)

[6] Defendants seek to limit the term "decoding" to the extraction of URLs that were previously encoded in a television or video programming signal. But as already discussed with reference to "programming," *supra*, such a limitation is not only at variance with the ordinary meaning of the term but also would render certain claims of the patents nonsensical. For example, claim 1 of the '664 patent expressly encompasses both a means for receiving programming containing a video and audio signal and a *second* means for receiving one or more uniform resource locators. The third paragraph of the same claims a "means for decoding, *connected to the second receiving means*" (emphasis added). Based on this language alone, "decoding" must include the extraction of some URLs not encoded in video or television signals.

Furthermore, defendants' definition of decoding would limit the patent claims to the first preferred embodiment. Only in the first preferred embodiment are the URLs encoded in video or television programming upon receipt by the user. In all of the other embodiments in all three patents, the URLs have either been extracted from the video or television programming prior to receipt by the user or never encoded into the video or television programming at all. Since the "means for decoding" is, in all three patents, linked to the "means for receiving," "receiving means," or "receiver," the term "decoding" must refer broadly to extraction or retrieval of data from any data stream-not necessarily a video or audio signal-based on a predetermined format or encoding scheme.

7. "connected" ('181 patent, *claims 1 and 12*; '664 patent, *claims 1 and 3*; '768 patent, *claims 1 and 19*)

[7] Defendants assert that the term "connected" refers to structures that are physically connected. However, nothing in the specification or claim language of the patents limits that term to physical connections. FN1 Absent such a limitation, it makes sense to give the term its ordinary meaning of "joined" or "linked," whether physically or otherwise. In term of function, since the claim language refers to means connected to each other for the purpose of data transfer, the definition of "connected" is simply joined or linked with the capacity of transferring data.

FN1. Defendants' argument that the term "connected" in claim 12 of the '181 patent needs to be distinguished from "in communications with" in claim 13 of the '181 patent does not lead to the conclusion that "connected" refers exclusively to a physical joining or linkage. Claim 13 refers to a "web browser in communications with the Internet connection." *See* the '181 patent, col. 60, 11. 50-51. It simply makes no sense to talk about a web browser "joined or linked" to the Internet connection, whether physically connected or not.

8. "interpreting" ('181 patent, *claim 1*; '664 patent, *claim 1*; '768 patent, *claims 1 and 19*)

[8] Although "interpreting" on its face means analyzing and translating, defendants seek to limit the term's use here solely to the function illustrated in Figure 3 of all three patents of determining whether an incoming URL was previously received, and, if not, performing error checking and correction before sending it to a web browser. Defendants point to a description of the preferred embodiment that states that the client software "interprets the URL and determines whether the URL has been received previously ...". '181 patent, col. 5, 11. 20-22; *see also* '664 patent, col. 7, 11. 44-46; '768 patent, col. 7, 1. 67-col. 8, 1. 2. However, quite aside from the fact that there is no reason to read this sentence as dispositive for all forms of interpreting involved in these patents, defendants' definition would make the second part of the quoted sentence redundant. Furthermore, the term "interprets" is elsewhere used in the patents in ways entirely different from defendants' proposed definition. Thus, other parts of the specification refer to client software that "retrieves the URLs, interpret[s] these URLs and direct[s] the JAVA enabled browser to retrieve the relevant Web page." Accordingly, the Court concludes that, in accordance with the function of the patented invention, "interpreting" refers to any kind of analyzing and translating utilized to enable the browser to effectively retrieve the relevant Web page.

9. "web browser" ('181 patent, *claim 1*; '768, *claims 1 and 19*)

[9] Given the Court's previous conclusion that "Web" refers to World Wide Web, it follows that "web browser" refers to a software application that can be used to locate and display Web pages in human-

readable form. FN2 *See, e.g.,* Def. Ex. 13, Microsoft Computer Dictionary (3d ed.1997) (defining "Web browser" as a "client application that enables a user to view HTML documents on the World Wide Web"); Webopedia, <http://www.webopedia.com/TERM/b/browser.html> (defining "browser" as "a software application used to locate and display Web pages."). FN3

FN2. The Court finds no significance in the fact that "Web," which is elsewhere capitalized in the claim language (thereby more clearly reflecting its use as short-hand for the World Wide Web), is here lower-cased: for its function still relates, on the face of the claims, to locating an displaying pages that the claim language refers to as emanating from "Web sites."

FN3. Although these definitions were published subsequent to the prosecution of the patents, every indication suggests that these definitions were consistent with that understood by one of ordinary skill in the art in 1996, when the application for the '181 patent was filed.

In addition to the foregoing nine terms appearing in claim 1 of the '181 patent (as well as elsewhere), the Court, as set forth in prior orders, concludes that four other disputed terms that appear in certain other claims needed to be defined, as follows:

10. "member broadcaster" ('768 patent, *claims 1 and 3*)

[10] Taken in context, and with reference to the function of the patents to synchronize web pages with television and/or video programming, the specification makes clear that "member broadcaster" refers to any of a plurality of distinguishable television broadcast organizations authorized to access a member account so as to synchronize the sending out of URLs with associated television programs. *See* '768 patent, col. 3, ll. 45-65. The Court is unconvinced by plaintiffs' contention that just because users of the patented system are sometimes referred to as "members," "member broadcaster" somehow refers to any and all users who are in any way broadcasters. *See* tr. Oct. 5, 2001, at 117-18.

11. *receiver* ('768 patent, *claim 19*)

[11] Claim 19 of patent 768 claims "a receiver, for receiving a video signal and the playlist...." As with the term "programming," *supra*, there is no need to read the conjunction "and" to require that the playlist *must* be integrated with the video signal. Since, rather, the specification describes a playlist being sent to students' desktops during playback of a pre-recorded program, *see* '768 patent, col. 10, ll. 47-49, it is clear that the playlist and video signal need not be integrated. Thus, "receiver" here means a device that can receive video signals and playlists either together or independently.

12. "server" ('768 patent, *claim 19*)

[12] The term "server," as understood by one of ordinary skill in the art, normally refers to a computer that manages network resources. *See* Def. Ex. 12, Webopedia, <http://www.webopedia.com/TERM/s/server/html>. Nothing in either the claim language or the patent specification indicates that any alternative meaning is here sought to be conveyed.

13. "service Web site" ('664 patent, *claim 3*)

[13] The term "service web site," like the term "member broadcaster," refers back to the site described in the '664 patent specification through which certain specified users, namely the broadcasters, are provided member accounts and authorized to enter information that will allow them to synchronize the transmission of URLs to particular television audiences. See '664 patent, col. 3, 11. 42-49, col. 5, 11. 48-64.

The claim constructions that result from the foregoing definitions will be further elaborated and relied upon in the Court's forthcoming decision on the parties' cross-motions for summary judgment.

S.D.N.Y., 2002.

ACTV, Inc. v. Walt Disney Co.

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