United States District Court,
N.D. California.

OPENTV, INC., a Delaware corporation,
Plaintiff and Counterclaimant.
v.
LIBERATE TECHNOLOGIES, a Delaware corporation,
Defendant and Counterdefendant.
Liberate Technologies, a Delaware corporation,
Counterclaimant.
v.
OpenTV, Inc., a Delaware corporation,
Counterdefendant.

No. C 02-00655 JSW

Dec. 2, 2003.

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CLAIMS CONSTRUCTION ORDER

JEFFREY S. WHITE**, District Judge.**

A claim construction hearing to construe the disputed terms of U.S. Patent No. 5,819,034 (the '034 Patent), U.S. Patent No. 5,563,648 (the '648 Patent) and U.S. Patent No. 5,991,799 (the '799 Patent), pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), was held on July 15, 2003 before this Court. Having carefully reviewed the parties' papers, heard the parties' arguments and considered the relevant legal authority, and good cause appearing, the Court will now construe the disputed claim terms within the three patents.

BACKGROUND

OpenTV, Inc. ("OpenTV") seeks to prevent Liberate Technologies ("Liberate") from infringing OpenTV's patents. Liberate has counterclaimed asserting that OpenTV's patents are invalid and unenforceable. The technology provides interactive television services which enable television viewers to participate actively in television shows. Viewers can play along with game shows, change between camera angles when viewing sporting events, access detailed statistics during a sporting broadcast, and order products and services while watching television. More specifically, the disputed patents generally disclose a distributed computing

system for transmitting and receiving executable multimedia applications; execution of an audio video interactive ("AVI") receiver receiving a packet stream including a directory and an AVI program; and a method for receiving incoming information to a recipient on a presentation interface. ('034 Patent at Abstract; '648 Patent at Abstract; '799 Patent at Abstract.)

ANALYSIS

A. Legal Standard.

The scope and meaning of the disputed terms of a patent claim are a matter of law for the court to decide. Markman, 517 U.S. at 372. To determine the meaning of a patent claim, the court considers three sources: the claims, the specification, and the prosecution history. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed.Cir.1995) (*en banc*), *aff'd,* Markman, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577.

In construing the claims, the court must begin with an examination of the claim language itself. "[T]he analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point out and distinctly claim the subject matter which the patentee regards as his invention." Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193, 1201-02 (Fed.Cir.2002) (internal quotations and citations omitted). "The terms used in the claims bear a 'heavy 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." Id. at 1202; *see also* Teleflex, Inc. v. Ficosa North American Corp., 299 F.3d 1313, 1325 (Fed.Cir.2002). "The claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim." Renishaw PLC v. Marposs Societa' per Aziono, 158 F.3d 1243, 1248 (Fed.Cir.1998).

The words in the claim must then be interpreted "in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history, if in evidence." Teleflex, 299 F.3d at 1324-25. "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996).

A patentee is presumed to have intended the ordinary meaning of a claim term in the absence of an express intent to the contrary. York Products, Inc. v. Central Tractor Farm & Family Ctr., 99 F.3d 1568, 1572 (Fed.Cir.1996). "The subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history)." Markman, 52 F.3d at 985. "Rather the focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean." Id. at 986. Indeed, "unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant art." Texas Digital, 308 F.3d at 1202 (citations omitted).

Intent to limit the scope of a claim, despite apparently broad language, can be demonstrated in four ways. First, if the patentee "acted as his own lexicographer," and clearly set forth a definition of the disputed term in either the specification or the prosecution history, the court will defer to that definition. CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed.Cir.2002) (citations omitted). Second, the court will adopt an altered meaning of a term "if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention." Id. at 1367. Third, a claim term will not take on its ordinary meaning "if the term chosen by the patentee so deprives the claim of clarity as to require resort to the other intrinsic evidence for a definite meaning." *Id.* Finally, a term in a means-plus-function claim is

limited by statute to the structure or step described in the patent. 35 U.S.C. s. 112 para. 6.

Under 35 U.S.C. s. 112 para. 6, a patentee may express a claim limitation functionally, without reciting a structure for performing the claimed function. *See* Envirco Corp. v. Clestra Cleanroom, Inc. ., 209 F.3d 1360, 1364 (Fed.Cir.2000). Such a limitation is construed "to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. s. 112 para. 6. When interpreting claim language governed by 35 U.S.C. s. 112 para. 6, the court must first identify the claimed function and the next identify the structure in the written description that correspond to that function. *See* Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1257-58 (Fed.Cir.1999). Section 112 para. 6 does not "permit incorporation of structure from the written description beyond that necessary to perform the claimed function." Id. at 1258.

Limitations from the specification (such as the preferred embodiment) cannot be read into the claims, absent an express intention to do so. *See, e.g.,* Teleflex, 299 F.3d at 1326 ("The claims must be read in view of the specification, but limitations from the specification are not to be read into the claims.") (citations omitted); CCS Fitness, 288 F.3d at 1366 ("a patentee need not describe in the specification every conceivable and possible future embodiment of his invention"); Altiris v. Symantec Corp., 318 F.3d 1363, 1372 (Fed.Cir.2003) ("resort to the rest of the specification to define a claim term is only appropriate in limited circumstances"). To protect against reading limitations from the specifications into the claims, the court should not consult the intrinsic evidence until after reviewing the claims in the light of the ordinary meaning of the words themselves. Texas Digital, 308 F.3d at 1204-05 (holding that to act otherwise "invites a violation of our precedent counseling against importing limitations into the claims") (citations omitted).

Only if the analysis of the intrinsic evidence fails to resolve any ambiguity in the claim language may the court rely on extrinsic evidence, such as expert declarations. Vitronics, 90 F.3d at 1583 ("[i]n those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper.") Extrinsic evidence should be used only if needed to assist in determining the meaning or scope of technical terms in the claims, and may not be used to vary or contradict the terms of the claims. *Id*. (citing Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1216 (Fed.Cir.1995)).

Dictionaries also may play a significant role in the determination of the ordinary and customary meaning of a claim term. The Federal Circuit has characterized dictionaries as "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." Texas Digital, 308 F.3d at 1203. "Such dictionaries include dictionaries of the English language, which in most cases will provide the proper definitions and usages, and technical dictionaries, encyclopedias and treatises, which may be used for established specialized meanings in particular fields of art." Inverness Med. Switzerland GmbH v. Princeton Biomeditech Corp., 309 F.3d 1365, 1369 (Fed.Cir.2002).

In addition, the court has the discretion to rely upon prior art, whether or not cited in the specification or the file history, but only when the meaning of the disputed terms cannot be ascertained from a careful reading of the public record. Vitronics, 90 F.3d at 1584. Referring to prior art may make it unnecessary to rely upon expert testimony, because prior art may be indicative of what those skilled in the art generally understood certain terms to mean. *Id*. Unlike expert testimony, these sources are accessible to the public prior to litigation to aid in the determination of the scope of an invention. *Id*.

B. Claim Construction.

1. "A source of"

OpenTV proposes that the term "a source of" be construed as: "one or more suppliers of data." OpenTV contends that it is well-settled law that "the term 'a' or 'an' ordinarily mens 'one or more.' " (Br. at 5, citing Tate Access Floors, Inc. v. Interface Architectural Resources, Inc., 279 F.3d 1357, 1370 (Fed.Cir.2002).)

Liberate proposes the term be construed to mean: "a supplier of data." Liberate contends that "a source of" must be interpreted as a single source of a data stream and contends that where a patent provides no indication that the patentee intended the article "a" to have any" meaning other than its normal, singular meaning, it is not proper to interpret the word to mean "one or more." (Opp. at 7, citing North American Vaccine, Inc. v. American Cyanamid Co., 7 F.3d 1571, 1575-76 (Fed.Cir.1993).)

The Federal Circuit in *Tate Access* established that the ordinary meaning of the term "a" in patents is construed to mean "one or more" and specifically examined the term "a" in the context of the patent at issue. Tate Access, 279 F.3d at 1370. The court determined that the ordinary meaning was appropriate as the specification indicated that the patentee in other portions of the specifications clearly constricted the description to "a single visible decorative layer" as opposed to the disputed term designating "an inner layer." *Id*.

In *North American Vaccine,* the Federal Circuit determined that the patentee had not indicated any intention to have a plural meaning imputed to the word "a." North American Vaccine, 7 F.3d at 1575-76. The court determined that "[w]hile it is generally accepted in patent parlance that 'a' can mean one or more, there is no indication in the patent specification that the inventors here intended it to have other than its normal singular meaning." *Id*.

The holdings of *Tate Access* and *North American Vaccine* indicate that the default construction of the term "a" or "an" is "one or more," but that the specific patent language must be examined in order to determine whether the patentee intended to distinguish a singular object or rather, intended the term to be construed as a broader designation. Liberate has failed to identify a clear intent to limit the claim language to a singular embodiment. In addition, the patentee has elsewhere in the claim language used explicitly singular language. (*See* '034 Patent at 16:11-12 (designating transmitted modules with a "single distributed computing application.") Therefore, the holding of *Tate Access* applies in this circumstance, and the Court will adopt the default construction of the term "a" to mean "one or more."

Accordingly, the Court construes the term "a source of" as: **one or more suppliers of data.**

2. "A data stream providing a series of time division multiplexed packets"

OpenTV proposes that the term "a data stream providing a series of time division multiplexed packets" be construed as: "one or more suppliers of data flowing from one device to another providing one or more groups of packets in succession each arranged in a time division multiplexed manner. A time division multiplexed packet is a packet that is included in a signal that is separate into many segments, each having a very short duration."

Liberate proposes the term be construed to mean: "a supplier of a data stream providing a series of associated data packets corresponding to a single service (channel), where each packet is assigned a time for transmission in a single data stream; e.g., in an MPEG system, a single MPEG service."

a. "a data stream providing"

As already determined, "a" generally connotes "one or more" and thus, the term "a data stream" in this context is interpreted to mean "one or more data streams." The plurality of the interpretation is consistent with the patent specifications. (*See* '034 Patent at 4:40-43, 4:47-49; 10:54-56.) Also, consistent with the specifications in the patent and the purpose of the invention, the Court construes the term "data stream" to mean "data flowing from one device to another." (*See* '034 Patent at 3:1-12.)

b. "a series of time division multiplexed packets"

The plain and ordinary dictionary meaning of the term "series" is one or more groups in succession. (*See* Melaugh Decl., Exh. G .) There is no support in the patent for the restriction advanced by Liberate that the series must additionally correspond to a single service or channel. The term "time division multiplexed" refers to a common practice of separating one or more streams of data into many segments, where each segment is of short duration. Both parties agree that each packet is assigned a time for transmission and each such time for transmission itself occurs within some single data stream. (*See* Br. at 7; Opp. Br. at 10.) The term "packets" generally refers to units of information transmitted as a whole from one device to another. (*See* Melaugh Decl., Exh. I.) There is no specific designation of the type of packet in the claim language, and the Court cannot read into the claims the limitations from the specifications, absent an express intention to do so. *See, e.g.,* Teleflex, 299 F.3d at 1326 ("The claims must be read in view of the specification, but limitations from the specification are not to be read into the claims.") (citations omitted). Thus, Liberate's contention that the packets are "associated" or that the phrase includes the restriction that it be "a collection of data, a header identifying the packet type, and an error detection code" is unpersuasive. In addition, there is no indication in the claim language that it only refers to an MPEG system, and Liberate's attempt to so construe the patent language appears to be an impermissible effort to read the limitations from the specifications-or one preferred embodiment-into the claimed invention. FN1

FN1. During the oral presentation on the disputed claim terms, counsel for Liberate contended that its allusions to the MPEG system was merely by way of example. However, Liberate's proposed construction would so limit the term. The Court cannot import to the claims the limitation from the preferred embodiment in the patent specifications.

Accordingly, the Court construes the term "a data stream providing a series of time division multiplexed packets" as: **one or more suppliers of data flowing from one device to another providing one or more groups of packets in succession each arranged in a time division multiplexed manner. A time division multiplexed packet is a packet that is included in a signal that is separate into many segments, each having a very short duration and where each packet is assigned a time for transmission in some single data stream.**

3. "Distributed computing application associated with said video program"

OpenTV proposes that the term "distributed computing application associated with said video program" be construed as: "an application that executes in a distributed computing system which may or may not be accompanied by companion data resources and which is related to the video program."

Liberate proposes the term be construed to mean: "Executable (machine) code, which form a complete

application and is related to and synchronized with the content of the video program, and which controls the generation of audio and graphics, and which controls the operation of a programmable apparatus (computer or microprocessor) in the client computer apparatus."

a. "distributed computing application"

The parties' central disagreement in the construction of this term is whether the distributed computing application is properly construed to mean machine code. Both parties agree that the distributed computing application includes computer program code that is executable, *i.e.,* able to be executed. (*See* Br. at 8; Opp. Br. at 13.) The specification describes the data stream to include "data representing the distributed computing application ... including executable code and data." (*See* '034 Patent at 3:5-9.) The prosecution history indicates that "a distributed computing application is a computer program which is executable ..." (*See* Melaugh Decl., Exh. B at 5.) Further, the prosecution history distinguishes between executable code, on the one hand, and data and commands, on the other. (*See id*. at 9.) The patentee stated that a key difference between the claimed invention and the prior art is that in the prior invention, "only data and executable commands are transmitted ... [and] the transmitted information does not include a distributed computing application." (*See id*. at 8.) In distinguishing the present invention from the prior art, the patentee emphasized that a group of commands transmitted and loaded into the prior invention "can hardly be equated with the executable code modules" of this invention. (*See id*. at 6.) Executable code is the machine language native to the central processing unit that can be directly executed by the central processing unit. (*See* Faillace Decl., Exhs. 5-9.)

The invention's primary distinction from prior art is the fact that the distributed computing application transmits executable code which, when received by the client computer, is extracted from the data stream, stored in memory and executed. (*See* '034 Patent at 5:17-21.) The patent also indicates that the distinction of this invention from prior art is the fact that "no mass storage is required because the data stream provides the function of the mass storage device, and the main memory requirement is modest because only the current executing portion of the program need be stored in memory." (*See* ' 034 Patent at 3:23-27.) Liberate contends that there is therefore no part of the distributed computing application which must be in mass storage as the system must be capable of operating without *any* mass storage. (Opp. Br. at 17.) However, the patent explicitly states that although no mass storage is required, some modest memory is required to execute the program. There is no explicit indication one way or the other whether the modest memory capability may contain portions of the application, although it is clear that only the currently executing portion of the program is stored in memory. (*See* '034 Patent at 3:25-27.) Therefore, the Court may not so constrict the construction of the term application to be a "complete application."

Accordingly, the Court construes the term "distributed computing application" to mean "executable (machine) code, which form an application that executes in a distributed computing system."

b. "associated with said video program"

The term "associated with" means that the application is related to the video program. (*See* Melaugh Decl., Exh. G.) The specification indicates that synchronization is optional. (*See* '034 Patent at 6:63-7:5.) Therefore, Liberate's proposed construction of the term "associated with" is too restrictive and not supported by the patent language. The Court adopts OpenTV's construction of the term "associated with said video program."

Accordingly, the Court construes the term "distributed computing application associated with said video

program" as: **executable (machine) code, which form an application that executes in a distributed computing system and which may or may not be accompanied by companion data resources and which is related to the video program.**

4. "Means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program"

Both parties agree that the term "means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program" must be construed as a mean-plus-function element subject to interpretation under 35 U.S.C. s. 112(6). Both parties agree that the recited function is "assemble said distributed computing application and execute said distributed computing application to form an interactive video program in which execution of said distributed computing application alters said video program."

OpenTV contends that the corresponding structure is the following hardware elements: processor 210 and RAM 212. Liberate proposes the term refer to the corresponding structure of processor 210, RAM 212, and ROM 214 (and program instructions stored in ROM 214). Therefore, the only dispute between the parties is whether ROM 214 is properly included in the corresponding structures.

The *function,* as described in the patent, indicates that "[i]n operation, processor 210 of processing unit 224 retrieves program instructions permanently stored in ROM 214, or temporarily 10 stored in RAM 212, and executes the from retrieved instructions to read data from ROM 212 and/or RAM 214, write data to RAM 212 and/or receive data from or supply data to outside sources ...." (*See* ' 034 Patent at 12:49-54.) However, the corresponding *structure* is described as "processing unit 224 includes a processor 210, read/write memory (RAM) 212 and ready-only memory (ROM) 214 coupled together in a known manner via system bus 216." (*See* '034 Patent at 12:34-37.)

Accordingly, the Court construes the term "means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program" to refer to the **corresponding structure of processor 210, RAM 212, and ROM 214.**

5. "Directory module containing information inter-relating packets associated with said distributed computing application"

OpenTV proposes that the term "directory module containing information inter-relating packets associated with said distributed computing application" be construed as: "group of data containing information to identify and locate packets."

Liberate proposes the term be construed to mean: "a module that includes information identifying all of the code and data packets being repetitively transmitted in the data stream, information inter-relating code packets, information inter-relating code packets with associated data packets, information regarding the size of the packets, and other information, and determines which code module is first to be executed."

Liberate's proposed construction would require that the Court import limitations from the specifications into the claim language. (*See* '034 Patent at 10:9-16.) The Court cannot import the limitations from the specifications, absent an express intention to do so. *See, e.g.,* Teleflex, 299 F.3d at 1326. In addition, the limitations from the specifications are compiled as a list, preceded by an "e.g.," indicating the patentee's intention to list examples of the types of information that may be included in the directory module, but

indicating that all such identifying data need not be present. The directory in order to be a directory at all must, however, include "a list of all the code and data modules which are present in the data stream, along with information about those modules." (*See* '034 Patent at 5:50-53.)

Accordingly, the Court construes the term "directory module containing information inter-relating packets associated with said distributed computing application" as: **a group of data containing a list of all of the code and data packets which are present in the data stream and information to identify and locate packets.**

6. "Packet stream"

OpenTV proposes that the term "packet stream" be construed as: "one or more series of packets transmitted from one device to another. 'Packet' is further defined as a unit of information transmitted as whole from one device to another."

Liberate proposes the term be construed to mean: "a signal sent from a broadcaster that includes a stream of associated data packets that include time division multiplexed video data, audio data, one or more data packets, a directory, execution signals, and an AVI program, which include one or more code packets; e.g., in an MPEG system, a single MPEG service."

The terms used in the claims bear a heavy 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. *See, e.g.,* Teleflex, 299 F.3d at 1325. The dictionary definition of the terms indicates that a packet stream is defined as "one or more series of packets transmitted from one device to another. (*See* Melaugh Decl., Exhs. H and I.) Further, the term packet is defined as a unit of information. Liberate's proposal would, it appears, seek to import the description from the specification which is impermissible absent a clear disavowal of the scope of the claim. *See* Teleflex, 299 F.3d at 1325.

Accordingly, the Court construes the term "packet stream" as: **one or more series of packets transmitted from one device to another. 'Packet' is further defined as a unit of information transmitted as whole from one device to another.**

7. "AVI program"

OpenTV proposes that the term "AVI program" be construed as: "one or more computer programs which are associated with and enhance or alter the audio/video components of a TV program or other audio/video program."

Liberate proposes the term be construed to mean: "a portion of the packet stream that contains one or more code packets that form a complete application, and does not include execution signals."

The patent concerns the execution of an audio video interactive executable program component. (*See* '648 Patent at 1:4-6.) AVI is the acronym adopted for "audio video interactive." An AVI program, as described in the patent, refers to a computer program that is associated with and enhances or alters the audio/video components of a TV program or other audio/video program. Liberate's proposed construction is at once too expansive and too restrictive. The proposed construction of the term to be limited to merely "a portion of the packet stream" is too general to be instructive because it omits the operative issue relating to the audio/visual components of the program. The rest of Liberate's proposed construction is too narrow as it

requires that the Court import limitations from the patent specifications.

Accordingly, the Court construes the term "AVI program" as: **one or more computer programs which are associated with and enhance or alter the audio/video components of a TV program or other audio/video program.**

8. "Loading the AVI program into a memory in response to the presence of the AVI program in the packet stream"

OpenTV proposes that the term "loading the AVI program into a memory in response to the presence of the AVI program in the packet stream" be construed as: "loading the AVI program into memory in response to at least the condition that the AVI program is present in the packet stream."

Liberate proposes the term be construed to mean: "automatically, unconditionally without user intervention, loading the AVI program into memory directly in response to the presence of the actual AVI program in the packet stream."

The central dispute between the parties is whether the term "in response to the presence of the AVI program in the packet stream" indicates that the loading does not require any user intervention, as advanced by Liberate, or whether the presence of the AVI program is one in a series of possible necessary conditions to loading, as advanced by OpenTV. Liberate's contention that the specification confirms that in all of the embodiments the system automatically loads the AVI program is unsupported by the claim language. Again, the Court cannot import the limitations from the specification into the construction of the claim language absent an express intention to do so. *See, e.g.,* Teleflex, 299 F.3d at 1326. However, the proposed construction by OpenTV that the loading of the AVI program is in response to "at least" the condition that the AVI program is present in the packet stream is ambiguously broad. Instead, at the *Markman* hearing, the parties accepted the Court's suggestion that the term be construed to mean that the loading of the AVI program into memory occur upon detection of the AVI program in the packet stream.

Accordingly, the Court construes the term "loading the AVI program into a memory in response to the presence of the AVI program in the packet stream" as: **loading the AVI program into memory upon detection of the AVI program in the packet stream.**

9. "Halting execution, and unloading the executing AVI program from the memory in response to detection of a special signal packet containing an end execution signal"

OpenTV proposes that the term "halting execution, and unloading the executing AVI program from the memory in response to detection of a special signal packet containing an end execution signal" be construed as: "stopping execution of the AVI program when a special signal packet containing an end execution signal is detected in the packet stream, and freeing the memory containing the AVI program."

Liberate proposes the term be construed to mean: "automatically, unconditionally without user intervention, stopping execution of the AVI program when a special signal packet containing an end execution signal is detected in the packet stream, and freeing the memory containing the AVI program so that the AVI program cannot be executed without re-loading the AVI program into memory."

The primary distinctions between the parties' positions is Liberate's contention that, again, the term "in response to" be construed to mean "automatically, unconditionally without user intervention" and the

contention that after the AVI program is halted, it cannot be executed without re-loading the AVI program into memory. As to the first of the disputes, the Court has already construed the term "in response to" to indicate that it is upon detection of, in this case, the special signal packet containing an end execution signal. With regard to the contention that the memory has to be completely wiped clean and that the program cannot be executed without re-loading the AVI program into memory, the one embodiment contained in the specification which indicates that a halted program "disappears from the decoder"cannot be imported to the claim language. (*See* '648 Patent at 13:66-67.) OpenTV's proposed construction incorporates the concept that halting execution and unloading the program from memory frees the memory containing the AVI program, but nothing in the claim language itself supports Liberate's proposed construction which requires that there be absolutely no remnant of the program or that the program cannot be executed without a complete re-loading.

Accordingly, the Court construes the term "halting execution, and unloading the executing AVI program from the memory in response to detection of a special signal packet containing an end execution signal" as: **stopping execution of the AVI program when a special signal packet containing an end execution signal is detected in the packet stream, and freeing the memory containing the AVI program.** FN2

FN2. The parties independently agreed that the terms "dumping the AVI program from memory" and "removing said executing AVI program from memory" both have the same meaning as "unloading the ... AVI program from memory." (*See* Revised Joint Claim Construction Statement dated July 15, 2003, Exh. B.) The Court will adopt the parties' agreement and adopt the same construction for the term "unloading" to apply to the terms "dumping" and "removing."

10. "Background element"

OpenTV proposes that the term "background element" be construed as "a component of the apparatus that interacts with interactive information sources and receives from passive information sources, and determines whether information from those sources is likely to be interesting to the recipient, possibly using one information source to determine priority for another. The background is operative even when the foreground is inactive, and when the background detects new information of interest to the recipient (for example, exceeding a selected threshold of interest or satisfying a selected criterion for interest), it causes the foreground to become active and engage the recipient to select and view that new information. The background element does not include a tuner."

Liberate proposes the term be construed to mean: "software component that receives information from the information receivers."

The central dispute between the parties is whether the disputed term refers to a software or a hardware component. Liberate contends that the patent specifications set out the physical components of the information multiplexer which include a processor, memory and mass storage. (*See* '648 Patent at 4:14-18.) Liberate therefore argues that the background element must be a software component, running on the delineated physical components. (*See* Br. at 8; Reply at 3.) However, the Court is persuaded by OpenTV's argument that the elements that comprise the information multiplexer, as indicated in Figure 1 of the patent, contain both the foreground and background elements, each part may contain software as well as hardware. (*See* Opp. Br. at 4.) The claim language explicitly sets forth the scope of the claim and states that it claims "[a]pparatus for presenting information to a recipient, said apparatus including a background element ..." (

See '648 Patent at 14:37-39.) Therefore, the "background element," ineluctably a broad and ambiguous term, in order to be consistent with the claim language which defines the *apparatus* of the claimed invention, must be construed to mean hardware. The Court is not persuaded that the function of the background element, which does not appear to be contested by the parties and which is found in the patent specifications, is a necessary part of the construction of the term.

Accordingly, the Court construes the term "background element" as: **a component of the apparatus that receives and interacts with information from information sources.**

CONCLUSION

Based on the analysis set forth above, the Court adopts the foregoing constructions of the disputed terms. The parties are ordered to submit a further joint case management report pursuant to Patent Standing Order para. 13 within 21 days of the filing of this Order.

IT IS SO ORDERED.

N.D.Cal.,2003.
OpenTV, Inc. v. Liberate Technologies