United States District Court
For the Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

TRANS VIDEO ELECTRONICS, LTD.,

Plaintiff,

v.

SONY ELECTRONICS INC., SONY CORPORATION OF AMERICA, SONY COMPUTER ENTERTAINMENT AMERICA, INC., SONY COMPUTER ENTERTAINMENT INC., and SONY CORPORATION.,

Defendants.
_____/

No. C 09-3304 MHP

MEMORANDUM & ORDER

Re: Claim Construction

Plaintiff Trans Video Electronics, Ltd. ("Trans Video") brought this action against defendants ("Sony," collectively), alleging infringement of claim 3 of U.S. Patent No. 5,991,801 (the "'801 Patent," Docket No. 111 (Silbersher Decl.) Exh. A)). Now before the court are the parties' claim construction briefs, filed pursuant to Patent Local Rule 4-5. Having considered the parties' arguments and submissions, and for the reasons set forth below, the court construes the disputed terms as follows.

BACKGROUND

The patent at issue relates to "an apparatus and method for transmitting digital information to locations throughout the world" and in particular to a "global news distribution system" for transmitting digital news clips and/or photographs from one or more locations anywhere in the world to any one or more locations elsewhere in the world. '801 Patent 1:11-18. The '801 Patent resulted

from a divisional application of App. No. 08/085,329 ("the '329 App."), which issued as U.S. Patent No. 5,594,936 ("the '936 Patent," Silbersher Decl. Exh. G), itself a continuation-in-part of discontinued App. No. 08/047,089 ("the '089 App.," Silbersher Decl. Exh. F).

At the time of the invention, in order for a television station to receive a video clip from a remote location, a video clip would need to be "uplink[ed]" to a satellite from that remote location and "downlink[ed]" by the television station, which could then either broadcast the video live, tape it for later broadcast, or retransmit to another television station having its own satellite dish. The drawbacks of such a system were that (1) data could only be sent serially from point-to-point in the direction in which a satellite dish was pointed, rather than from one point simultaneously to multiple points; (2) video clips could only be stored in analog format; (3) the then-current process did not provide "on-demand news," requiring prearranged transmissions to and from television stations; (4) there was no central digital database that televisions could access and see a menu of available news clips; (5) television stations could not obtain news clips from a "hub station" and immediately digitally edit them; and (6) there was no "flexible" system whereby a hub station could transmit videos at various rates to accommodate the different data transfer rates at receiving sites. '801 Patent at 1:31-59. The '801 Patent sought to overcome these drawbacks in the prior art.

The specification discloses two embodiments of the claimed invention. A diagram of the first disclosed embodiment is below:

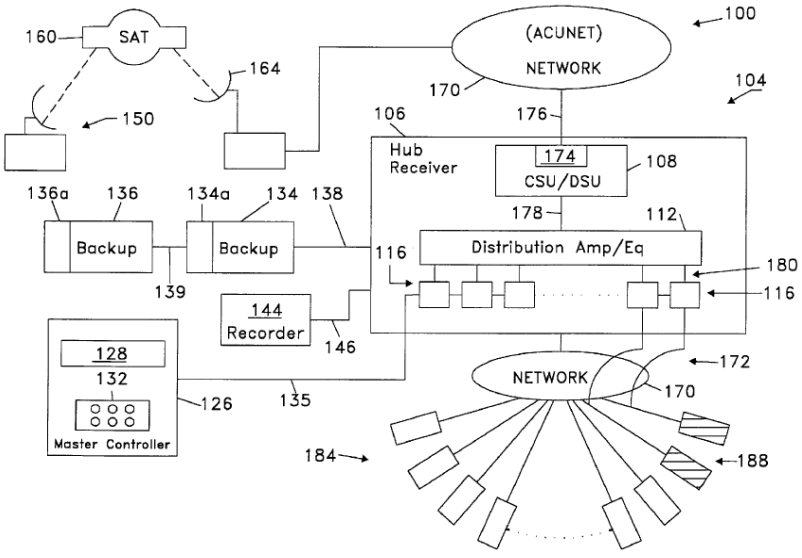


FIGURE 1B

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Id. Fig. 1B. In this embodiment, a "suitcase transmission unit" (150) gathers a video clip and transmits the clip to a satellite system, which eventually downlinks the clip to one or more earth stations coupled to a digital land network (170). The digital network is a "synchronous digital system" coupled to a hub receiver (106), in particular a "master Customer Service Unit/Data Service Unit" ("CSU/DSU") (108). The video clip is input to the master CSU/DSU, which receives a "synchronous digital data stream" and initiates communications between the network and a "distribution amplifier equalizer" (112). The master CSU/DSU outputs the digital signal to the distribution amplifier/equalizer, which splits up the signal to a plurality of CSU/DSUs (116), which are in turn coupled to receiving stations in the land network (184). *Id*. 4:10-26; 4:57-5:8. At the same time that the signal is transmitted out of the distribution amplifier/equalizer unit to the CSU/DSUs, a "backup signal" is sent to backup units (134 and 136), which transforms the synchronous compressed signal into an asynchronous compressed signal for storage on a hard disk. *Id*. 5:20-25; 5:55-57.

Figure 5 of the '801 Patent discloses another embodiment of the invention:

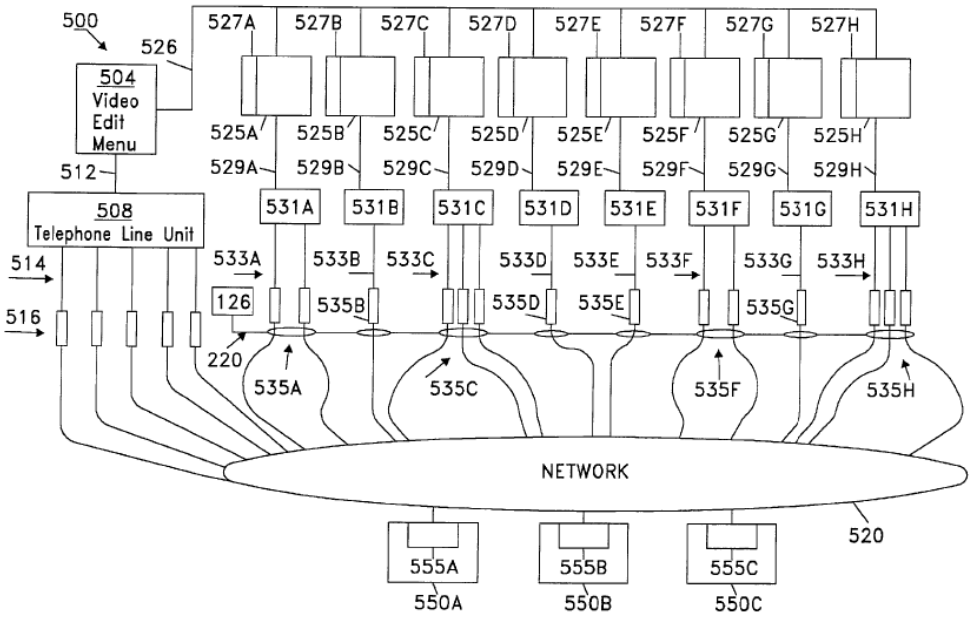


FIGURE 5

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This "on-demand video news distribution system" includes a plurality of units (525A-525H) "similar to backup units 134 or 136" above, each corresponding to a different news topic or subject matter. For example, one unit could correspond to current affairs in Japan, another could correspond to events in Germany and another could relate to international financing. Each unit includes "a respective memory 527A-527H such as a hard disk in which digital information can be stored. *Id.* at 6:41-51. Users (550A-550C) at television stations, newspapers or magazine printing houses dial the telephone number of a "video menu unit" (504) using computers (555A-555C), whereupon the user can view "a menu listing the various clips and/or still photographs available on units 525A-525H." If the user wishes to obtain a particular clip, "he or she simply enters a command to menu unit 504 which in turn sends a 'request-to-send' command to the appropriate video storing unit." The video storing unit then sends the video clip via its corresponding distribution amplifier/equalizer (531A-531H) and corresponding CSU/DSU unit (535A-535H), which is coupled to the computer (555A-555C) in the land network (520). *Id.* 4:66-7:13.

Claim 3 of the '801 patent teaches an "information distribution system for a network" that comprises six elements:

1. plurality of video clip storage units that each store data related to a particular subject matter;

2. a master communications unit coupled to the digital network that establishes communications with the network in order to receive a synchronous digital signal corresponding to the data related to said particular subject matter stored in a respective one of said plurality of video clip storage units;

3. a plurality of distribution amplifier units coupled to said master communications unit, wherein each of the plurality of distribution amplifier units has an input that receives said synchronous digital signal corresponding to the data from a respective one of said plurality of video clip storage units and at least one output that divides said synchronous digital signal corresponding to the data from said respective one of said plurality of video clip units into a plurality of synchronous signals;

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4. a plurality of communications units, each of said communications units being coupled to one of said plurality of distribution amplifier units to respectively establish communications between respective ones of said plurality of distribution amplifier units and a plurality of receiving stations in the digital network to receive and output corresponding ones of said plurality of synchronous signals to the plurality of receiving stations;

5. a master controller unit coupled to said plurality of communications units to control said plurality of communications units from a central location; and

6. a menu storing unit accessible from the digital network that stores information indicating the subject matter associated with each of said plurality of video clip storage units and information as to how to access each of said video clip storage units.

Id. 8:20-54.

LEGAL STANDARD

I. Claim construction

Under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 389–90 (1996), the court construes the scope and meaning of disputed patent claims as a matter of law. The first step of this analysis requires the court to consider the words of the claims. *Teleflex, Inc. v. Ficosca N. Am.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). According to the Federal Circuit, the court must "indulge a 'heavy presumption' that a claim term carries its ordinary and customary meaning." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). To determine the ordinary meaning of a disputed term, the court may review a variety of sources including the claims themselves, other intrinsic evidence such as the written description and prosecution history, and dictionaries and treatises. *Teleflex*, 299 F.3d at 1325. The court must conduct this inquiry not from the perspective of a lay observer, but rather "from the standpoint of a person of ordinary skill in the relevant art." *Id.* (citing *Zelinski v. Brunswick Corp.*, 185 F.3d 1311, 1316 (Fed. Cir. 1999)).

Among the sources of intrinsic evidence, the specification is "the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). By expressly defining terms in the specification, an inventor may "choose[] to be his or her own lexicographer," thereby limiting the meaning of the disputed term to the definition provided in the specification. *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed. Cir.

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1999). In addition,"[e]ven when guidance is not provided in explicit definitional format, 'the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.'" *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) (quoting *Bell Atl. Network Servs., Inc v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001)). "The specification may also assist in resolving ambiguity where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex*, 299 F.3d at 1325. However, the Federal Circuit has cautioned that the written description "should never trump the clear meaning of the claim terms." *Comark Comms., Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (citations omitted); *see also Tate Access Floors, Inc. v. Maxess Techs., Inc.*, 222 F.3d 958, 966 (Fed. Cir. 2000) ("Although claims must be read in light of the specification of which they are part, . . . it is improper to read limitations from the written description into a claim . . . .").

Likewise, the prosecution history may demonstrate that the patentee intended to deviate from a term's ordinary and accustomed meaning. *Teleflex*, 299 F.3d at 1326. "Arguments and amendments made during the prosecution of a patent application and other aspects of the prosecution history, as well as the specification and other claims, must be examined to determine the meaning of terms in the claims." *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995), *cert. denied*, 516 U.S. 987 (1995). "In particular, 'the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.'" *Teleflex*, 299 F.3d at 1326 (quoting *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985)).

The Federal Circuit revisited the basic approach to claim construction in *Phillips*. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In addition to reaffirming the principles set forth above, *Phillips* provides at least two pieces of additional guidance. Firstly, the Federal Circuit rejected a line of cases suggesting that claim interpretation must begin with a dictionary definition of the disputed terms. *Id.* at 1320–21. Secondly, the Federal Circuit emphasized that claim terms must

be interpreted in light of their context, especially the language used in other claims and the specification. *Id.* at 1321.

DISCUSSION

I. "master communications unit;" "digital network;" "corresponding to the data . . . stored . . ."

The parties dispute these three terms, all appearing in the second limitation of claim 3. Their arguments regarding these three terms all focus on whether claim 3 discloses a system whereby a user both uploads to and downloads videos from a plurality of video storage units. Although the terms "master communications unit" and "digital network" are susceptible (but certainly not limited) to the uploading of user-supplied video clips, the specification, prosecution history and the plain meaning of the term "stored" indicate that claim 3 is limited to video clips already residing on the disclosed video storage units.

A. "master communications unit"

Trans Video argues that this term should be defined as "a unit with an input for receiving videos from a network transmitted by a user," and Sony proposes the construction "a device that receives a synchronous digital signal from a digital network for distribution over the digital network to receiving stations." Both constructions import limitations into the term that are not supported by the claim language or the specification.

The '801 patent uses the term "master communications unit" in several places, providing sufficient explanation of its function so as to provide a reasonable definition of the term. For example, the abstract states that the system "includes a master communications unit for establishing communications with the network in order to receive a synchronous digital signal." The Summary of the Invention similarly describes "a master communications unit coupled to the digital network for establishing communications with the network in order to receive a synchronous digital signal from the network." 2:34-40. The Detailed Description of Preferred Embodiments describes a

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"master CSU/DSU," which the parties agree corresponds to the "master communications unit." *See* Docket No. 112 (Sony Response) at 19; No. 114 (Trans Video Reply) at 7. "CSU/DSUs are communication units which perform hand-shaking functions to initiate communications between synchronous digital equipment." '801 Patent at 3:58-60. Moreover, in the embodiment disclosed in Figure 1B, the master CSU/DSU "receives a synchronous digital data stream and performs handshaking functions. These handshaking functions initiate communications between network 170 and distribution amplifier equalizer 112." *Id*. 4:59-64. These descriptions of master communications unit indicate that the primary functions of the unit are to receive digital signals and to initiate communications, i.e. perform "handshaking functions" between the digital network and other digital equipment within the system.

The specification discloses that the master communications unit *can* be used to input video clip data from a user, but the patent also clearly teaches that the claim does not require such functionality. The first disclosed embodiment shows a video being recorded at a remote location and transmitted via satellite to a television station connected to a digital network. At this point, "[t]he compressed video news clip is input to master CSU/DSU 108 via line 176 . . . Master CSU/DSU 108 then outputs the digital synchronous digital signal which is received by distribution amplifier/equalizer 112. *Id*. 4:59-66. However, the claim does not recite that the master communications unit receives "videos"; it recites that the master communications unit receives a "synchronous digital signal." Accordingly, the second disclosed embodiment in Figure 5 does not clearly disclose any uploading of video clips to the video storage units via a master communications unit. Instead, the user sends a command to the menu unit via the master communications units/menu CSU/DSUs (516),[1] which in turn sends a "request-to-send" command to the appropriate storage unit to send the requested video clip to the user. A "master communications" unit cannot be construed narrowly to require the receipt of "videos," where the specification discloses a master communications unit performing a broader range of tasks. *See Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc*., 340 F.3d 1298, 1308 (Fed. Cir. 2003) ("[V]aried use of a disputed

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term in the written description attests to the breadth of a term rather than providing a limiting definition.").

Additionally, the term "master communications unit" is used elsewhere in the patent claims to establish communications with a digital network for purposes other than for receiving videos. For example, Claim 2 teaches a "plurality of master communications units . . . for coupling said master distribution amplifier unit to the digital network to make said information [indicating the subject matter associated with each video clip storage means] accessible from the digital network." '801 Patent at 8:14-19. Because claim terms are presumed to have consistent meanings, and the patent uses the term "master communications unit" in connection with various functionality, it cannot have the limited meaning proffered by Trans Video. *See Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) ("[A] claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent.").

To the extent that Sony's proposed construction is limited to the reception of digital signals "for distribution over the digital network to receiving stations," Sony's definition is also inappropriately limited. Although it appears that the purpose of the master communications unit in claim 3 is to receive a digital signal and distribute it over the network, master communications units in the patent serve purposes other than distribution of signals over the digital network to receiving stations. For example, Figure 1B discloses backup units 134 and 136, which convert the synchronous digital signal received by the master communications unit into an asynchronous signal and store that signal on a hard disk. Although this "backup signal is received by backup unit 134 or backup unit 136 at the same time" it is distributed out to the network, the master communications receives this signal both for transmission and for backup purposes. Furthermore, claim 2 teaches a master communications unit that makes information "accessible from the digital network," but it does not disclose "receiving stations" as Sony's definition requires.

Accordingly, the appropriate construction of "master communications unit" is a "unit that performs handshaking functions between digital equipment and a digital network in order to receive a synchronous digital signal from the network."

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B. "digital network"

In order to buttress its argument that claim 3 covers both the uploading and downloading of video clips, Trans Video defines this term as a "a bi-directional network of communications links for transmitting digital information including video in both directions." Trans Video argues that because the claim discloses a master communication unit that receives video from the digital network and also transmits videos to the network, "the digital network, thus, must be construed to be bi-directional so that videos can be transmitted in both directions—*to* users, and *from* users." Docket No. 110 (Trans Video Opening Brief) at 11. As explained above, the claim does not require a master communications unit that receives videos from users, and accordingly the digital network coupled to the master communications network does not necessarily require video uploads. There is nothing in the proffered intrinsic or extrinsic evidence to show that a digital network must be able to bi-directionally transmit and receive *videos* through the disclosed information distribution system. Figure 1B certainly discloses such a configuration, emphasized by the fact that the digital network transmitting the video clip to the hub receiver is assigned the same number (170) as the digital network that receives the video clip. During the prosecution of the parent application, the prosecuting attorney clarified "that network 170 represent[s] some external digital network which may (although need not) be one in the same" on both sides of the video clip transmission. Olesek Decl. Exh. C at PH 0281. On the other hand, Figure 5 discloses bi-directionality between the system and the digital network solely with respect to menu information and menu commands and not with respect to the actual transmission of video clips from the storage units to the requesting user. Accordingly, the specification describes the Figure 5 embodiment as an "*on-demand* video news distribution system." '801 Patent at 6:31. Nothing in the claim language limits the definition of "digital network" to the embodiment disclosed in Figure 1B, and the claim should be read more broadly to encompass the full range of embodiments disclosed in the patent that are consistent with the claim language.

Sony's proposed construction more appropriately encompasses the broader meaning of the term: "a network in which the information is encoded as a series of ones and zeros rather than as a

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continuously varying wave." Olesek Decl. Exh. J (Newton's Telecom Dictionary (8th ed. 1994)) at 324. This definition properly distinguishes the "digital network" disclosed in the '801 patent from the traditional analog network, whose limited functionality it sought to improve. Although the specification states that the "land network 170 can include *microwave* links, hard wire links and optical fiber links," '801 Patent at 4:18-21, Sony's proposed construction refers to the *encoding* of the transmitted information in binary series of ones and zeros, and not to its *transmission*, which may be accomplished via modulating a continuously varying wave. *See* Olesek Decl. Exh. K (IEEE Standard Dictionary of Electrical and Electronic Terms) at 355, 662.

C. "corresponding to the data related to said particular subject matter stored in a respective one of said plurality of video clip storage units"

The parties dispute whether the data "stored" in the video storage units must have been "already stored," as argued by Sony, or whether the reference to "stored" includes data that "has been or will be stored" in such units, as argued by Trans Video. In other words, Trans Video again argues that claim 3 teaches the uploading of videos by users to the video storage units. The claim language, in the context of the patent as a whole and in light of the relevant prosecution history, indicate to the contrary.

Most obviously, the claim uses the term "stored" in the past tense, indicating that the act of "storing" has been completed at the time that the master communications unit receives a signal related to the data in question. Several courts have emphasized the significance of the use of the past tense of a verb in a patent claim. *See, e.g.*, *Network Appliance Inc. v. Sun Microsystems Inc.*, 2008 U.S. Dist. LEXIS 76713, at *29 (N.D. Cal. Sept. 10, 2008) (Laporte, M.J.) ("[T]he past tense term 'written' has a plain meaning, indicating that the data record has already been written to a redundancy group before it is transmitted."); *Alloc, Inc. v. Unilin Decor N.V.*, 2007 U.S. Dist. LEXIS 16743, at *69 (E.D. Wis. Mar. 8, 2007) ("The panels become 'engaged' in a cooperative relationship once they are joined. The use of the past tense of engage, 'engaged,' indicates that the panels have been joined."); *see also* 5A Chisum on Patents § 18.03[2][b] ("Included in ordinary meaning are the rules of English grammar."). Moreover, as plainly demonstrated by Trans Video's

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proffered construction, in order for the claim language to cover the prospective storing of video clips in the storage units, the court would need to insert the words "that has been or will be" before the term "stored." This is entirely improper. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) ("Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee."). As described above, such an interpretation is entirely consistent with Figure 5 of the patent, which teaches a system without a disclosed means for users in the network to upload video clips to the storage units.

If Trans Video had intended the term "stored" to apply to the uploading of video clips to the storage units, it was fully aware of how to draft its claim accordingly. Indeed, it did precisely that when drafting Claim 1 of the '801 Patent. That claim discloses "a plurality of distribution amplifier means each having an input which receives video data *from* and stores video data *to* a respective one of said plurality of video clip storing means." '801 Patent at 7:37-39 (emphasis added). Such language unequivocally discloses the prospective storing, i.e., uploading, of video data to a video storage unit. In this context, the use of the past-tense "stored" indicates that such uploading was not envisioned by the claim drafters.

The prosecution history of claim 1, particularly in contrast with claim 3, strongly buttresses the conclusion that claim 3 does not cover the uploading of video clips to the storage units. On May 15, 1998, Claim 9 (which became Claim 1 of the '801 patent), Claim 17 (which became Claim 3) and several other claims were rejected as anticipated by U.S. Patent No. 5,014,125 ("Pocock"). *See* Olesek Decl. Exh. D at PH 0413. Prior to the office action, Claim 1 disclosed, in relevant part, "a plurality of distribution amplifier means each having an input which receives data from a respective one of said plurality of video clip storing means." *Id*. at PH 0391. In its response to the office action, Trans Video amended the claim language to read, as it does in its issued form, "a plurality of distribution amplifier means each having an input which receives <u>video</u> data from <u>and stores video data to</u> a respective one of said plurality of video clip storing means." *Id.* at PH 0427. Accordingly, Trans Video distinguished Pocock on the grounds that Pocock discloses a "<u>one-way delivery</u> of the requested information" and "the claimed invention recites an information distribution system that

can store and retrieve video information . . . See claims 9 and 27." *Id*. at 437-38. Turning to Figure 5, the prosecuting attorney similarly pointed out that "the video news distribution system 500 can start with no video clips and accumulate an extensive library over time. The users can make the library something like an associated press (AP) but for video/audio clips." *Id*. at 439.[2]

Trans Video did not, however, amend Claim 17 (Claim 3 as issued) to employ similar language, nor did it make any argument with respect to that claim regarding the ability of users to "make the library." Instead, after concluding its "make the library" discussion and reiterating the proffered amendment to Claim 9, Trans Video turned to Claim 17 and stated the following:

> With respect to claim 17, Applicants respectfully submit that Pocock does not disclose a master controller unit coupled to the plurality of communications units to control the plurality of communications units from a central location. Figure 5 is amended to specifically illustrate the claimed master controller unit in the enclosed Request For Approval of Drawing Amendment.

Id. at PH 0440. Accordingly, in order to overcome the Pocock rejection, Trans Video amended Figure 5 to explicitly include support for the master controller unit (126) disclosed in the fifth limitation. *See id.* at PH 0422-23. It did not argue that Claim 17's language, namely the use of the term "stored," encompassed the ability of the user to upload videos and "make the library" contained in the video storage units.

Accordingly, Sony's proposed construction is adopted. The "corresponding to data . . ." phrase in the second limitation is construed as "the recited signal corresponds to the data that is already stored in the video clip storage unit that stores data relating to the particular subject matter."

II. "synchronous digital signal"

Claim 3 discloses a "synchronous digital signal" that is (1) received by the master communications unit; (2) transmitted from the master communications unit to the distribution amplifier units; (3) divided into a plurality of synchronous digital signals; and (4) transmitted via a plurality of communications units to receiving stations in the digital network. The parties dispute whether the "synchronous" nature of this digital signal means that all the sending and receiving equipment is synchronized to a single "common" clock (as Sony argues) or whether the signal merely needs to be synchronized to "a clock" between each component in the chain. Sony argues

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that because the synchronous digital signal transmitted between the various components in the system is the same signal, all the devices in the system must be synched to a common clock. Trans Video counters that the use of the term "said" in connection with the signal merely indicates that the transmitted video is the same, not that every node in the distribution chain is synched to the same clock.

Trans Video appears to have the stronger argument. Sony's proffered technical dictionary meaning appears to be more consistent with Trans Video's argument that only synchronization between successive links in the distribution chain is necessary. For example, the McGraw-Hill Dictionary of Scientific and Technical Terms (5th ed. 1994) defines "synchronous data transmission" as "data transmission in which a clock defines transmission times for data" and "synchronous communications" as requiring "synchronization of the sending and receiving *devices*"—not the *terminal* equipment proposed by Sony. Olesek Decl. Exh. L at 1973 (emphasis added). According to Newton's Telecom Dictionary (8th ed. 1994),"synchronous transmission means there is a constant time between successive bits, character or events. The timing is achieved by the sharing of a single clock. *Each end of the transmission* synchronizes itself with the use of clocks and information sent along with the transmitted data." *Id*. Exh. J at 994 (emphasis added). "In synchronous transmission, characters are spaced by time, not by start and stop bits." *Id*. So long as each sending and receiving device shares a clock with the next device in the chain, it can send a transmission without the need to add start and stop bits. The parties do not provide, nor does the patent expressly teach, that there needs to be a master clock to which every disclosed element must be synched. The court will not read into the claim equipment that is not disclosed by the patent.

Sony points out that both the "master communications unit" and "plurality of communications units" are coupled to a digital network, described as a "synchronous digital system" in the specification. *See* '801 Patent at 4:20-21. Because a "synchronous network" is one "in which all the communication links are synchronized to a common clock," *see* Olesek Decl. Exh. J at 994, and the communications units are coupled to the digital network, Sony argues all the elements of the claimed system must also be coupled to a common clock. *See* Sony Response at 28.

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The digital network, however, is one element of the claimed invention, and the patent does not state that the claimed system as a whole is a "synchronous network." Instead, there are bases for inferring that the various components within the claimed system can be synched to more than one clock. Firstly, the backup units disclosed in Figures 1B, 1D and 2 convert the synchronous signal to an asynchronous signal for storage on a hard disk and converts that asynchronous digital signal to a synchronous "backup signal" for output to the distribution amplifier/equalizer. *See* '801 Patent at 5:20-31, 53-55. Because a synchronous digital signal is converted from synchronous to asynchronous for intermediate storage and potential later transmission, it is reasonable to conclude that there could be multiple clocks operating within the disclosed system. Secondly, the specification teaches that the plurality of CSU/DSUs "can have transmission rates varying from 9.6 kilobytes/s (corresponding to normal telephone line rates) up to 2Megabytes/s (corresponding to special high speed data line rates.)" *Id*. 6:19-23. Given that one of the drawbacks in the prior art system was the inability "to transmit its video clips at various rates to accommodate various rates of data transfer at various receiving sites," such varying rates of transmission at each of the plurality of communication units may necessitate multiple clocks. The patent does not speak to this aspect of the invention, but it also provides no persuasive reason for adopting the narrow construction Sony requests.

Although the court agrees with Trans Video that the patent does not require a common clock, the court is reluctant to read "a clock" into the claim, given that the term at issue can be defined according to the proffered dictionary meaning without imposing additional equipment. The term "synchronous digital signal" is therefore construed as a "digital signal in which transmitted characters are spaced by time, not by start and stop bits."

III. "receiving station"

Both parties improperly seek to read limitations from the specification into the construction of this term.

Trans Video proposes that a receiving station is "a unit for receiving and transmitting digital information, including a modem." The claim does not require, however, that the receiving station

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have the capacity to transmit digital information. The sole function of the plurality of receiving stations disclosed in claim 3 is to receive a plurality of digital signals output from the distribution amplifier units via the communications units. The claim does require that the menu storing unit be accessible from the digital network, but there is nothing to indicate that the "receiving stations" transmit digital information to the menu storing unit or to any disclosed element of the claim. Furthermore, and perhaps most obviously, the patentee used the term "receiving," not "receiving and transmitting" station, and the court must give effect to the plain meaning of the chosen language in the absence of some clear indication to the contrary.

The specification arguably provides some support for a "receiving station" that has transmission capacity. Figure 5 discloses computers 555A-C, which both send a command to the menu unit and receive a requested video clip. Figure 1B discloses a remote suitcase 188, which captures a video clip and transmits it via satellite to a digital network, and the specification teaches that "remote suitcases 188 can be used as receiving stations as described in U.S. patent application Ser. No. 08/047,089." However, the specification expressly qualifies that this is so "if no digital network (e.g., ACUNET) is available." '801 Patent at 5:4-8. Claim 3 discloses a plurality of receiving stations "in the digital network," undercutting the argument that the remote suitcase units correspond to the receiving stations in claim 3. The primary receiving stations 184, disclosed in Figure 1B and coupled to the digital network, function *solely* as receiving stations, and there is no other equipment disclosed that function as both transmitting and receiving units.

Sony proposes the following construction: "a device coupled to a network that is synchronized to a common clock timing signal with a communications unit to receive video clip data transmitted over the network." As discussed above, the court does not adopt Sony's "common clock" limitation in the construction of a "digital synchronous signal." To the extent that the receiving station would be construed so as to be coupled to a communications unit or to a digital network, such a construction would be duplicative of other language in the claim expressly linking the various elements together and would be inconsistent with the specification, which discloses that a remote suitcase can be a "receiving station" when no digital network is available.

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Accordingly, the term "receiving station" is construed without the improper limitations proposed by the parties to mean, broadly, "a device for receiving digital information."

IV. "communications unit"

In addition to a "master communications unit," claim 3 recites a plurality of "communications units" which establish communications between a distribution amplifier unit and receiving stations in the digital network. Because a master communications unit is a particular type of communications unit, the construction of the two terms necessarily will be related. As noted above, the specification discloses a CSU/DSU as one embodiment of a communications unit and states that such units "perform hand-shaking functions to initiate communications between synchronous digital equipment." Trans Video further provides a dictionary definition of a "channel service unit (CSU)" which "performs transmit and receive filtering, signal shaping, longitudinal balance, voltage isolation, equalization, and remote loopback testing in a digital communications environment." Silbersher Decl. Exh. M (The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000) at 159. Its proposed construction, "a unit that initiates communications between digital equipment to receive and transmit signals," sufficiently captures the meaning of the unit as envisioned by the claim and the supporting written description.

Sony's proposed construction unnecessarily limits the scope of the term. It proposes that "communications unit" be construed as "a device that connects to the digital network to establish synchronous communication with receiving stations for one way transmission of video clip data to receiving stations." Several aspects of this proposed construction merely incorporate other disclosed elements of claim 3 into the definition of "communications unit," rendering other language in the claim superfluous. *See* 5A Chisum on Patents § 18.03[2][b][iii][A] ("[A] word or phrase in the claim should not be so interpreted so as to render other words and phrases in the claim superfluous."). Connection to the digital network, communications with receiving stations, and one way transmission of video clip data may all be aspects of the particular communications units disclosed in claim 3, but the term "communications unit" has a broader meaning as disclosed in the specification and demonstrated by the term's differing functionality in various other claims. *See*,

e.g., '801 Patent at 9:38-44 (Claim 10); 10:26-34 (Claim 20). Moreover, because the "master communications unit" is itself a type of "communications unit," the broader term should not be construed so as to exclude the narrower term from its definition. *Cf. Phillips*, 415 F.3d at 1314-15 ("[T]he claim in this case refers to 'steel baffles,' which strongly implies that the term 'baffles' does not inherently mean objects made of steel."). Sony's proposed definition would do precisely that.

A closer question is whether "communications units" are limited to devices that facilitate communications between *synchronous* digital equipment. As mentioned above, the specification explicitly states that the CSU/DSU initiates communications between "synchronous" digital equipment, seemingly supporting Sony's position. On the other hand, Trans Video points to a statement in the prosecution history of the parent application that "CSU/DSUs are not limited to communications units between synchronous digital equipment only, but can also serve to interconnect asynchronous equipment to synchronous equipment. Silbersher Decl. Exh. I, at 3. To support this contention, the prosecuting attorney submitted user manuals describing then-existing CSU/DSUs and their capacity to handle both synchronous and asynchronous communications. *Id.* Exh. J at 1, 14. Although the disclosed embodiments refer to communications between synchronous equipment, the claim does not necessarily require such a narrowing construction, as the synchronous nature of the interconnected digital is made clear by other language in claim 3. Again, the term "communications unit" is used throughout the claims in the '801 Patent, but it is only used in conjunction with a "synchronous" signal in claim 3. The patentee's inclusion of the term synchronous in one claim but not in others indicates that the communications unit does not *inherently* require that communications be initiated between two synchronous digital devices.

The court adopts Trans Video's proposed construction.

V. "distribution amplifier unit"

The parties dispute whether there is any need to construe this term. Sony proposes that the term be defined as "a signal amplifier and signal splitter which amplifies the received digital signal into a plurality of digital signals; the output digital signals are the same as the digital signal input thereto." Trans Video argues that no construction is necessary because the claim speaks for itself in

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that it already discloses that a distribution amplifier "divides said synchronous digital signal . . . into a plurality of synchronous signals." Alternatively, Trans Video proposes that the term be construed simply as a "signal amplifier."

During the prosecution of the parent '329 application, the examiner requested clarification regarding the distribution amplifier:

> It is not clear from the disclosure of what structure(s) the "distribution amplifier" . . . was comprised and it is not clear how such a structure was capable of operating to convert a single synchronous digital input into a plurality of synchronous digital signal outputs. Further, it is not clear whether the respective digital signal outputs of said distribution amplifier were in fact the same or were different. Clarification is needed.

Olesek Decl. Exh. C at PH 0272-73 (Office Action dated April 10, 1995). In response, Trans Video stated:

> [T]he digital signal outputs from distribution amplifier/equalizer 112 are the same (subject to the standard signal-to-noise principles) as the digital signal input thereto. The distribution amplifier/equalizer is merely a signal amplifier and a signal splitter which amplifies the received digital signal into a plurality of digital signals (or vice versa) to be output to CSU/DSUs 116 and then output to the network. The name distribution amplifier/equalizer was chosen, because the unit amplifies the received digital signal, distributes (splits) that signal among multiple outputs, and equalizes the amplitudes of those signals before outputting them to CSU/DSUs 116.

Id. at PH 0284. Accordingly, the distribution amplifier is not just a "signal amplifier" as Trans Video proposes, but instead it combines a signal amplifier with a signal splitter. Given that the examiner requested clarification of the term, and the reasonable likelihood that a jury could also be confused by the term, the court will construe the term as "a signal amplifier and signal splitter which amplifies the received digital signal into a plurality of digital signals."

The court will not, however, adopt Sony's proposed construction to the extent that it requires the output digital signal to be the same as the digital signal input. Although Trans Video discussed the sameness of the input and output signals in the same passage as it discussed the structure of the distribution amplifier unit, the examiner's request for clarification indicates that these are separate inquiries. The nature of the input and output signals of the distribution amplifier unit appears to relate more directly to other terms in the claim, such as perhaps the term "plurality of synchronous digital signals." Trans Video argues in a footnote that this proposed construction should not be

adopted because it relates to a term the parties agreed not to address. *See* Trans Video Opening Brief at 27 n.5. Even without regard to the equitable concerns raised by Trans Video, Sony's proposed narrowing construction appears to be an attempt to shoehorn a limitation into the claim. A combination of a signal splitter and amplifier could certainly output a signal of greater or lesser amplitude than the input signal, and the court will not import narrowing definitions from the prosecution history without some bases for so doing in the disputed term.

VI. "video clip"

Sony proposes that the each of the "video clip[s]" stored in the "plurality of video clip storage units" be construed as "a short video recording or a section of a video recording." As used in the claims and in the specification, there is nothing to indicate that the disclosed clips must be short or that they must be a section of some longer video recording. One of the touted features of the invention is that "it makes it possible to selectively edit news clips at the local station, if desired," suggesting that a clip will be transmitted before it is edited down from some longer video recording. '801 Patent at 2:28-29. Moreover, in the first disclosed embodiment, a "suitcase transmission unit" at a remote location "gathers a video clip, compresses that clip and then transmits or uplinks that clip" via a satellite to an earth station. *Id.* at 4:11-15. There is no editing or shortening of the video clip before transmission, only gathering and compression, indicating that a video clip can include raw, unedited video in its entirety.

Trans Video's construction, on the other hand, fails to give any effect to its deliberate use of the term "clip." It proposes that a "video clip" be construed as "audio/visual digital information transmitted over a digital network." The specification indicates, however, that a "video clip" is a narrower term than the "audio/visual digital information" in Trans Video's proffered construction. The "Field of the Invention" section states that "[t]his invention relates *generally* to an apparatus and method for transmitting *digital information* to locations throughout the world and *in particular* to global digital news distribution system for transmitting *digital news clips*." (emphasis added) The term "video clip" accordingly should not be conflated with all audio/visual digital information that might be transmitted over a network. Additionally, as Sony correctly points out, the specification

refers to video clips both before and after transmission over a digital network, such as the gathering of "video clips" by the remote suitcase unit. Trans Video's proposed language, "transmitted over a digital network," is therefore misplaced.

Sony has submitted numerous standard and technical dictionary definitions to demonstrate the ordinary and customary meaning of the term video clip. *See* Sony Response at 11; Olesek Decl. Exhs. F-I. Several of the definitions include a requirement that a clip be "short" or be an extract/excerpt from a longer film or television production. As explained above, these requirements are in some tension with the specification and impose limitations that do not appear in the claim. Some of the definitions, however, are worded somewhat more broadly and appear in harmony with the teachings of the patent. For example, Webster's New World Dictionary of Media and Communications (1990), Olesek Decl. Exh. G, defines "clip" as a "segment of a film or tape." Such a definition indicates that a "clip" must be of some discrete length, as opposed to a live video stream or feed of indeterminate duration. As another dictionary submitted by Sony indicates, "clip" traditionally referred to "a piece of film clipped off in the editing room," Olesek Decl. Exh. I, and therefore embodies a concept that is to a certain extent inapplicable to digital video capture and transmission. To the extent that a digital device starts and stops video recording, and thereby "gathers" a video with a definite beginning and ending, that pre-recorded video qualifies as a "video clip" for purposes of the '801 patent.

A "video clip" accordingly is construed as a "video recording of a discrete duration."

VII. "storage unit"

The parties' proposed constructions of these terms do not appear to be substantially different. Trans Video proposes that the term be construed as "a unit including a memory that stores digital information" and Sony proposes "a device in which information can be recorded and retained for later retrieval and use." The main point of dispute appears to be whether the storage unit is in fact a "device" that contains a memory device as one of its components, or whether the storage unit is a "unit" that includes a memory for storage.

The specification discloses, with respect to Figure 5, that "[e]ach of the plurality of units 525A-525H includes a respective memory 527A-527H such as a hard disk in which digital information can be stored." '801 Patent at 6:48-52. The distinction between the separately numbered storage units and respective memory, of which a hard disk is disclosed as an example, seems to indicate that the memory is a component of a larger storage device. Moreover, Sony's definition of "storage unit" comes directly from a contemporaneous dictionary definition, *see* Olesek Decl. Exh. J (Newton's Telecom Dictionary (8th ed. 1994) at 978, indicating that Sony's construction is the ordinary and accustomed meaning of the term. This construction appears entirely consistent with the claim language and the specification, and it is therefore adopted.

VIII. "information as to how to access each of said video clip storage units"

The final element of claim 3 is a "menu storing unit accessible from the digital network" that stores two types of information: (1) information indicating the subject matter associated with each storage unit; and (2) "information as to how to access each of said video clip storage units." The parties contest the meaning of this second type of information. At issue is whether this information must "enable[] a *user* to request videos stored in the video clip storage units," as proposed by Trans Video, or whether it must "enable[] the *menu storing unit* to command the video clip storage units to send video clips," as proposed by Sony.

In order to support its argument that this information is made available to the menu storing unit, but not directly to users, Sony points to the embodiment disclosed in Figure 5. The specification states that "[a] connected user can then view a menu *listing the various clips* and/or still photographs available on units 525A-525H. If the user wishes to obtain a particular clip, he or she simply enters a command *to the menu unit* 504 which *in turn* sends a "request-to-send" command to the *appropriate* video storing unit." '801 Patent at 7:4-9 (emphasis added). In this embodiment, the user is not presented with information as to what clips are contained in "each" storage unit (as required by the claim) or how to access the appropriate storage unit containing the requested video clip. All the user is presented with is a list of video clips and/or photographs, and it

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is the disclosed function of the menu storing unit to locate the appropriate video storing unit and send a "request-to-send" command to it.

Although in this embodiment the information at issue is not presented directly to the user, the claim is not limited to the disclosed embodiment. *See, e.g.*, *Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1375 (Fed. Cir. 2006) ("This disclosure and corresponding Figures do not limit the invention as a whole . . .") (collecting cases). The "menu storing unit" limitation says nothing regarding the manner in which the information it stores is presented to users, and it says nothing about how the unit functions internally. It only discloses that two types of information are stored in the menu storing unit and that the unit is accessible from the digital network. Moreover, the specification states that one advantage of the invention is that "local television stations can log into a menu which provides a list of available news clips *and how to acquire those clips*." '801 Patent at 2:19-21 (emphasis added). Within the language of the claim term, the disclosed menu storing unit can provide information on how to access a storage unit both directly to the user and more indirectly as disclosed in Figure 5.

The court therefore adopts Trans Video's proposed construction, with the modification that the claim expressly requires that the stored information reveal how to access "each" storage unit, not just the storage units in general. The disputed term is accordingly construed as, "information that enables a user to request video clips from a particular video clip storage unit."

CONCLUSION

The terms in dispute are construed as follows:

Term	Construction
"master communications unit"	"A unit that performs handshaking functions between digital equipment and a digital network in order to receive a synchronous digital signal from the network."

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"digital network"	"A network in which the information is encoded as a series of ones and zeros rather than as a continuously varying wave."
"corresponding to the data related to said particular subject matter stored in a respective one of said plurality of video clip storage units"	"The recited signal corresponds to the data that is already stored in the video clip storage unit that stores data relating to the particular subject matter."
"synchronous digital signal"	"A digital signal in which transmitted characters are spaced by time, not by start and stop bits."
"receiving stations"	"A device for receiving digital information."
"communications unit"	"A unit that initiates communications between digital equipment to receive and transmit signals."
"distribution amplifier unit"	"A signal amplifier and signal splitter which amplifies the received digital signal into a plurality of digital signals."
"video clip"	"A video recording of a discrete duration."
"storage unit"	"A device in which information can be recorded and retained for later retrieval and use."
"information as to how to access each of said video clip storage units"	"Information that enables a user to request video clips from a particular video clip storage unit."

IT IS SO ORDERED.

Dated: May 18, 2011

MARILYN HALL PATEL
United States District Court Judge
Northern District of California

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ENDNOTES

1. The parties dispute whether the second embodiment discloses a master communications unit at all. Trans Video contends that the units numbered 516 in Figure 5, also described as "menu CSU/DSU units" in the specification, provide support for this element. Sony points out that in the prosecution history of the parent application, Trans Video contended that "Unit 508 [and not 516] provides support for master communications means." *See* Docket No. 113 (Olesek Decl.) Exh. C, at PH 0265. Although accurately quoted, it appears this identification was scrivener's error. In the immediately preceding paragraph, the prosecuting attorney stated that "support for the plurality of master communications units is provided by units 516," and several paragraphs earlier he identifies unit 508 as corresponding to the "distribution amplifier 112 of Figure 1B." Moreover, the description of the menu CSU/DSUs (516) in Figure 5 hews closely to the "master communications unit" claim language in Claim 3; namely, both units receive a signal from the network corresponding to video clips stored in the video clip storage units.

Treating unit 516 as the master communications unit for purposes of claim construction does little to further Trans Video's arguments, however. Additionally, the court need not address Sony's related argument that the "master communications" element of Claim 3 violates the written description requirement of 35 U.S.C. § 112 ¶ 1.

2. This statement does not undermine the conclusion above that Figure 5 does not disclose a means for uploading video content from a digital network to the storage units. Although there is nothing in Figure 5 that *disclaims* the uploading of video data, rendering it compatible with the language of claim 1 and the argument made by the examining attorney with respect to that claim, the written description nonetheless does not expressly disclose the uploading of videos by users in the digital network.