IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

ERIC HAMILTON	)	
Plaintiff	)	Civil Action No.
v.	)	
	)	MJG 02-CV-2438
TERAGLOBAL COMMUNICATIONS CORP.	)	
WEBWISDOM.COM, INC	)	
Defendants	)	
	)	

PLAINTIFF'S REPLY BRIEF ON CLAIM CONSTRUCTION

In accordance with part C. 7. b. of the Scheduling Order in the above captioned matter, Plaintiff Hamilton hereby submits his Reply Brief on Claim Construction. Plaintiff has limited the discussion herein to a specific rebuttal of the arguments presented in Defendant's Opening Brief and has not repeated the arguments made in Plaintiff's Opening Brief. Plaintiff does not waive or withdraw any positions taken in its Opening Brief which are not specifically recited herein.

I. Claim Construction:

Defendant's list three sources of reference for interpretation of claim language (1) the words of the claim (2) the patent specification and (3) the prosecution history. However, as Defendant acknowledges, these sources are not considered in a vacuum, they are viewed in relation to the understanding of one skilled in the art. Markman v. Westview Instruments, 52 F.3d 867 at 986. The knowledge of one skilled in the art is substantially broader than the three sources and brings a much larger body of knowledge into the consideration of the meaning of the

terms of a patent. The prior art and the common usage of terms by one skilled in the art is not extrinsic evidence to be ignored but instead creates the fundamental background upon which the meaning of the terms of the patent claims are viewed.

Throughout Defendant's analysis Defendant has made the mistake of adding elemets from the specification into the claim instead of simply interpreting claim language:

> The district court also relied on the written description, prosecution history, and a declaration by Cisco's expert witness regarding the purpose of the invention to define claim 1 to require a cache for the instance of network policy. In so doing, the district court disregarded the well-established rule that while proper claim construction requires an examination of the written description and relevant prosecution history to determine the meaning of claim limitations, additional limitations may not be read into the claims. See, e.g., *Prima Tek II, L.L.C. v. Polypap, S.A.R.L., 318 F.3d 1143, 1148, 65 USPQ2d 1818, 1821 (Fed. Cir. 2003)*; *Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1186, 48 USPQ2d 1001, 1005 (Fed. Cir. 1998)*. We have recognized that there is sometimes a fine line between reading a claim in light of the written description and relevant prosecution history, and reading a new limitation into the claim. *Comark, 156 F.3d at 1186, 48 USPQ2d at 1005*. However, "interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation . . ., which is improper.'" *Intervet Am., Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)* (quoting *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433, 7 USPQ2d 1129, 1131 (Fed. Cir. 1988))*.
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> Storage Technology Corporation v. Cisco Systems, Inc., *2003 U.S. App. LEXIS 9173*, (Fed.Cir. May 13, 2003)

II. CLAIM 1

1. The Preamble of Claim 1:

Defendant's assert that the change in language in the preamble of claim 2 - "instructional information" to "electronic information" and finally to "electronic educational information" - leads to the limitation:

> "providing training or knowledge not previously known to a student through formal schooling in a classroom setting having a defined teacher or instructor and

> at least one defined student" where "the information can be derived from data only to the extent that the data is accurate."

This proposed interpretation not only adds several limitations (not previously known, formal classroom, defined teacher, accurate data) clearly not discussed or even presented during the prosecution of the '520 patent and directly contradicts the use of those terms by the Examiners, but also presents an unworkable definition which is clearly not the "ordinary meaning" of educational information. Further, such a limitation wold not act to distinguish over the cited art which was under discussion during the prosecution and as such would not be a proper limitation to derive from the prosecution history.

Because the preamble of a claim is not typically considered a claim limitation, Defendant must first demonstrate that the particular preamble in this patent should be considered a limitation:

> "It is well settled that if the body of the claim sets out the complete invention, and the preamble is not necessary to give life, meaning and vitality to the claim, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation." Schumer v. Lab. Computer Sys., Inc., 308 F.3d 1304, 1310, 64 USPQ2d 1832, 1837 (Fed. Cir. 2002)

Before the language of the preamble can be used to limit a claim, Defendants have to show that the body of the claim does not set forth the complete invention based up the claim and the invention as a whole.

> "Whether a preamble stating the purpose and context of the invention constitutes a limitation of the claimed process is determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history." Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc., 98 F.3d 1563, 1572-73, 40 USPQ2d 1481, 1488 (Fed. Cir. 1996). see also Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808, 62 USPQ2d 1781, 1784 (Fed. Cir. 2002).

When the words of the preamble refer to the invention as a whole or provide a convenient label, as in the instant case, they are not claim limitations:

> The district court based its interpretation in part on the presence of the phrase "policy caching method" or "policy cache" in the preamble of every independent claim of the *'040* patent. Whether to treat a preamble as a claim limitation is determined on the facts of each case in light of the claim as a whole and the invention described in the patent. See *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808, 62 USPQ2d 1781, 1784 (Fed. Cir. 2002)*. In the case of the *'040* patent, the written description consistently uses the terms "policy caching method" and "policy cache" to refer to the invention as a whole, not to the specific step of storing an instance of network policy or to the cache that stores the instance of network policy, which the written description refers to as the "instance policy cache." Similarly, the term "policy caching method" or "policy cache" in the preamble of each claim serves as a convenient label for the invention as a whole. See *IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1434, 54 USPQ2d 1129, 1137 (Fed. Cir. 2000)* (holding that preamble phrase "control apparatus" does not limit claim scope when it merely gives a descriptive name to the claimed invention). . . . . Thus, the preamble terms "policy caching method" or "policy cache" do not limit claim scope and simply refer to the invention set forth in the body of the claim. . . . . it was improper for the district court to further limit the scope of claim 1 based on language in the preamble.
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> Storage Technology Corporation, v. Cisco Systems, Inc., 2003 U.S. App. LEXIS 9173 (Fed. Cir. May 13, 2003).

see also Festo Corproation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., (Fed.Cir. 2002) 304 F.3d 1289; *64 U.S.P.Q.2D 1698*, an amendment must be made for reasons of patentability to have any narrowing effect.

The references under discussion during the prosecution of the '520 patent were Shapiro 4,785,472 and Erhardt 4,846,694 and later Abrahamson 5,002,491. Erhardt and Abrahamson are both set in the "formal classroom setting" as proposed in Defendant's claim construction. Shapiro has a "defined teacher and defined students." All of the references teach "educational information" according to the definition propose by Defendant's. Since the narrow limitation

proposed by Defendant would not have distinguished the claims over the asserted prior art, it is not a proper limitation to be inferred from the prosecution history because it would not have added in allowance and therefore should not restrict the claim.

Particular deference should be given to the use and understanding of the terms "instructional" and "educational" as they were used by the examiners during the prosecution of the '520 patent. Examiner Kubel was clearly not restricting his use of the terms "instructional" and "educational" to mean a "formal classroom setting." In the February 5, 1991 Office Action, Examiner Kubel refers to the Shapiro patent ("Remote Teaching System") using the terms "instructional information" "class" "instructor" and "student." In the February 20, 1992 Official Action, Examiner Crosby refers to Shapiro as an "interactive teaching environment" and refers to Shapiro's "input of handwritten information." The Shapiro reference is far from Defendant's "formal classroom" yet the very terms that Defendants seek to read into the claim language to restrict it to a "formal classroom" are used by the patent office to refer to Shapiro which describes:

> "A remote teaching system 2 includes a teacher station 4 and a plurality of student stations 6 which may be located at sites remote from one another."

If the preamble was believed to restrict the claim to a formal classroom, then Shapiro would not have been an appropriate primary reference and the examiners would have been compelled to cite to some prior art disclosure of a formal classroom to meet this limitation in properly rejecting the claims. Clearly neither Examiner Kubel nor Examiner Crosby had such a "formal classroom setting" restrictive view of education or instruction because no citation was ever made.

Examiner Cheng made the final examiner's amendment and allowance of the claims. The fact that Examiner Cheng does not directly state a reason for the addition of the term "educational," is not a basis to read restrictive language into a claim. Particularly when the restriction, "a formal classroom setting" would not have provided any distinction over either of the primary references Erhardt and Abrahamson. The Examiner's Statement of Reasons for Allowance, paragraph 4 on page 11 of the Notice of Allowability, cannot therefore be based upon a belief that the term "educational" means a formal classroom setting, because this would not be a distinction over Erhardt or Abrahamson.

Further, the definition proposed by Defendant would be completely unreconcilable with claim 9 which requires "more than two remotely-located stations." If claim 1 required the "formal classroom" then claim 9 would not be possible. The existence of claim 9, found on page 7 of the Notice of Allowance with notations by Examiner Cheng, is further evidence that Examiner Cheng did not believe his addition of "educational" was a restriction to a formal classroom.

Defendants proposed construction is not only not the "ordinary meaning" of educational information, but it is not a workable definition. For example, when a company conducts employee training, it is "educational information". Yet such employee training is most often performed outside of a formal classroom setting. Under Defendant's proposed definition, the University of Maryland University College, "the world's largest provider of online education" which "has been setting the standard in distance education for working adults worldwide." (Exhibit A) would no longer be considered an "educational" institution and none of the students attending the UMUC by internet extension classes would be receiving any "education."

The proposed definition would also disqualify any education which contained incorrect facts: "the information can be derived from data only to the extent that the data is accurate" and would exclude any teaching which "was previously known to a student." Aristotle taught that the world was composed of four elements: earth, air, fire and water. By Defendant's definition, Aristotle was not a "teacher" and none of his pupils were "students" and there was no communication of "educational information" all because he taught incorrect facts. An eighth grade math class during a review session for an examine would not be considered educational by Defendant's definition if the material being reviewed "was previously known to a student." This is certainly not the "ordinary meaning" and is not a definition derived from the prosecution history, the claims of the patent or the patent specification.

Under Defendant's proposal, the test for infringement would shift from an examination of the accused system to an examination of the state of knowledge of the users of the accused system. There is no such test in patent law.

2. Stations:

Defendant proposes adding the words "two specialized desks" to the term stations, when the claim is simply referring to two computers. There is no support for such an assertion. Stations is not written in means-plus-function language. Station is not used in the specification to mean anything other than a location from which one of the participants can participate in the communication of information.

Defendant cites to column 5, lines 3-5 of the patent for support of its proposed definition for the word station. However, the word station does not appear in this cite. Lines 3-5 define a

"representative desk (101)" The word station first appears in line 25. The station is the general reference to each participants location as well as the equipment located there and a means for holding the equipment, if necessary. The term station does not refer to a specialized desk and Defendant's can find nothing in the specification or file history to support this position. The instances of station are combined with references to the computer equipment:

line 25 - "... each station (i.e., inside the computer) ..."

line 27 - "... a disk drive (not shown) at the teacher station ..."

line 29 - "... student station uses the software ..."

line 39 - "...each student station would function as a so-called "terminal" and would not include a computer..."

Applicant never tried to distinguish the invention based upon a "specialized desk." No fair reading of the claim or prosecution history would include a "specialized desk" as a reason for allowance. In fact, none of the three examiners ever cited the "desk" as an element of the claims and never applied a piece of prior art to a "desk" element. The prosecution history never included any consideration or discussion of the "desk" as an element of any claim, because it was never an element of any claim. If any of the three examiners believed that a special desk was an element of the claim, they would be compelled to cite a reference to meet this claim limitation. No such reference was ever cited. The claims recite "A computer assisted electronic educational information communication system" not furniture for a classroom.

3. Monitor Means:

"Built into a desk" does not perform any of the functions of a monitor. The function of a

monitor is to display. It is not necessary to interpret this claim element as a means-plus-function element because, in addition to the functional language, the element recites structure sufficient to perform the claimed function in its entirety. Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1427-28, 44 USPQ2d 1103, 1109 (Fed. Cir. 1997). The monitor is sufficient structure to perform the function of display of information. Monitors are standard components which have known functions in a computer system. There is no special meaning incorporated in to monitor means for displaying in formation.

If the monitor means is a means-plus-function element, "built into a desk is still not aprt of the claimed element. Only that portion of the written description which is necessary to achieve the recited function should be imported into the claim. When construing a means-plus-function limitation, a court must identify both the claimed function and the corresponding structure in the written description for performing that function. Micro Chem., Inc v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed. Cir. 1999). Pursuant to §112, paragraph 6, a court may not import functional limitation that are not recited in the claim, nor may it include structural limitations from the written description that are unnecessary to perform the claimed function. Micro Chem at 1258. Thus a court cannot restrict the means limitation to structure that is disclosed in the preferred embodiment, but is not necessary to perform the recited function. Wegner Mfg., Inc. v. Coating Machinery Sys., Inc., 239 F.3d 1225, 1233 (Fed.Cir. 2001).

"Built into a desk" does not perform the recited function "for displaying electronic educational information in visual form." This is an unnecessary structural limitation found in an embodiment of the invention, which does not relate to the recited function.

4. Handwritten:

Defendant proposed construction of handwritten freehand form, ignores the alternatives explicitly recited in the patent specification and ignores the doctrine of claims differentiation. "Simultaneously and concurrently entering" means that each user can enter information at his/her station at the same time as the other users enter information at their stations. The entry of information is independent. There is no dispute as to the meaning of this part of this element of Claim 1.

The Patent Specification refers to the use of a mouse or a pen in the definition of handwritten freehand in several places: Column 14, line 13: "If a mouse rather than a pen is the input device and if the ..." Column 14, line 60: "Similarly, if the user is in a drawing or erasure mode (611), the line is drawn or erasure effected (with a white fillbar) (614). An evaluation of whether the communication is being shared with the teacher (616) (if this is a student situation) or with other students (618)(if this is a teacher situation) results in those coordinates with destination being sent (if a mouse rather than a pen is used) to the aforementioned sent_pt function (617 and 19), which prepares them for transmission to the appropriate destination via the send_que function..." Column 16, line 1: "... followed by a determination of whether the input device is a mouse or a pen (803) Thus, the implementation may be reconstructed using a mouse instead of a pen. When the pen is used (853B), the mouse is disabled (821)." Column 16, line 32: The "click areas" that define what events occur when a given spot on the screen is touched by the pen (or mouse, when a button is depressed) are then initialized..."

Several times in the file history, both the patent office examiners and Hamilton "... in freehand form, e.g., using a stylus or a mouse,..." refer to a mouse as a freehand drawing form.

The Defendant also ignores its own use of the term freehand in describing the tools included in infringing products. TerraGlobal/Wave Three describes the use of a mouse in entering information on the TerraGlobal/WaveThree whiteboard as "freehand." Teramedia Demo 6.2 User Guide, page 18: "The pen allow you to draw freehand on the Virtual Whiteboard workspace."

Wave Three - Session Workspace User Guide, (Exhibit D) page 1: "...you can use a variety of tools to draw freehand and correspond via a 'virtual whiteboard' environment."

Further, the doctrine of claims differentiation, as discussed in Plaintiffs opening brief precludes the requirement of a stylus being read in top Claim 1. "A hand-held stylus" is found in Claim 8, which depends directly from Claim 1 and adds no other limitations. It is improper to limit the recitation of "handwritten freehand" to "a hand-held stylus" as Defendant proposes. Such construction would render redundant or meaningless the limitation in claim 8. Handwritten freehand must therefore encompass more than a stylus used on a screen or pad, it must also encompass a mouse, as recited in the specification and discussed in the file history.

Additionally, "Input ... by a user drawing or writing directly on said display surface..." is found in Claim 13. Claim 17 recites "a user controlled hand-held stylus, stylus sensor, and stylus interface..." Claim 24 requires an "interactive monitor..." and Claim 25 recites "a user controlled freehand writing stylus, ... stylus sensor..." Each of these are limitations on the handwritten freehand language which should not be imported in to claim 1.

5. Input Means:

Defendants analysis of the input means recited in the specification ignores the fact that a

mouse is considered an alternative input means, as discussed above with respect to handwritten.

6. Virtually Simultaneously and Concurrently

Plaintiff contends that "virtually simultaneous" is not the same as "simultaneous." Any system for transmission of information will require a certain time lag for the information to be distributed from one location to other locations in the system. Simultaneous transmission and or display is not an object of the invention. The important aspect of the invention is that it allows multiple users to "simultaneously and concurrently entering said information" from a number of separate inputs without having to wait for a transfer of program control as was required by the limitations of the cited prior art. Distribution of the information to the other participants need not be simultaneous as long as it was "virtually" simultaneous.

Defendant asserts that teh Court should read out the word "virtually" and interpret virtually simultaneous" to mean the same thing as "simultaneous." This language was modified with care during the prosecution history and the distinctions were known to the patent examiners. Had the applicant or the examiners believed the two distinct phrases to mean the same thing they would have used the same phrase. Defendant, without support, asserts that the claims should be construed such that any delay in transmission, however slight and regardless of the reason, would be outside the scope of coverage of the claims.

Defendant also asserts that if "virtually simultaneous" does not mean "simultaneous" then the claim is invalid as indefinite. The need to rely on one of ordinary skill when the patent provides sufficient information for those skilled in the art to determine the range of acceptability for "virtually simultaneous" is not a reason form invalidity. The claim must satisfy the test that

it appears to the participants that they are sharing an electronic sheet of paper. A reasonable delay for data updating, dependant upon communication speed between the computers would satisfy this claim element. see Exxon Research and Engineering Co. v. United States, 265 F.3d 1371 (Fed. Cir. 2001):

> In determining whether that standard is met, . . , we have not held that a claim is indefinite merely because it poses a difficult issue of claim construction. . . . Under a broad concept of indefiniteness, all but the clearest claim construction issues could be regarded as giving rise to invalidating indefiniteness in the claims at issue. But we have not adopted that approach to the law of indefiniteness; rather, what we have asked is that the claims be amenable to construction, however difficult that task may be. If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite. If the meaning of the claim is discernible, even [**16] though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds. . . . at 1375 (citation omitted) ". . . by finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of patent validity, . . , and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal." Id. (citations omitted); see also Athletic Alternatives, Inc. v. Prince Mfgr., Inc., 73 F.3d 1573, 1581 (Fed. Cir. 1996).

7. Communication Means:

There are several suggested embodiments for the communication means found in the patent specification as well as the statement that:

> ...more typically will be effective using network protocols that
>
> operate at higher speeds...

The claim element "communication means" is not limited to the specific structure of a preferred embodiment. It is only limited to that structure required for the function recited in the claim, transmission, and equivalents to that structure.

It is well settled that a claim is not limited to the technology existing at the time of the

filing of the patent. The emergence of alterative and/or improved technology for implementation of an aspect of the claimed invention, subsequent to the filing and/or issuance of a patent will be encompassed in the scope of the claims if such an advance is equivalent to the claimed and/or recited structure.

8. Adapted, Student, Hand-Held and Stylus

a. Adapted: No dispute as to the accepted dictionary definition exists, therefore there is no need for construction of this word.

b. Student: A student does not need to attend a school, college or university. For example, a student of the arts may simply visit museums and attend free lectures without any structure to his studies. In fact defining student in terms of "school" leaves open the definition of a school.

c. Hand-held: No dispute as to the accepted dictionary definition exists, therefore there is no need for construction of this word.

d. Stylus: A computer stylus is neither sharp nor pointed. It must de dull and rounded otherwise it will damages the computer screen or pad upon which it is used for writing.

e. Instructor: The instructor is simply the individual participant who is imparting the educational material at the time. It is not necessarily a fixed individual because a group discussion can be a communication of educational information and the providers and recipients of the information change during the discussion.

f. Means for transmitting:

This element from claim 10 should be given meaning determined dependant upon the recited function in that claim.

g. Means for enabling:

This element from claim 11 should be given meaning determined dependant upon the recited function in that claim.

h. Means for queing:

This element from claim 12 should be given meaning determined dependant upon the recited function in that claim.

CONCLUSION

For the forgoing reasons, this Court should not adopt Defendants proposed overly narrow claim construction but should afford the claims of the Hamilton patent their full and proper scope as defined herein.

Respectfully Submitted:

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