

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

CHARLES E. HILL)
& ASSOCIATES, INC.)
)
Plaintiff,)
)
v.)
)
COMPUSERVE, INC. and)
COMPUSERVE INTERACTIVE)
SERVICES, INC.,)
)
Defendants.)

CAUSE NO. IP 97-0434-C M/S

ORDER ON SUMMARY JUDGMENT MOTIONS

Four summary judgment motions have been filed in this case by defendants CompuServe, Inc. and CompuServe Interactive Services, Inc. (collectively ACompuServe@), each of which seeks judgment as a matter of law on the plaintiffs= patent infringement claims. CompuServe asserts different grounds for each motion: 1) non-infringement based on the absence of the element of storing, which is common to all claims; 2) non-infringement based on the absence of classifying product information into Aconstant@ and Avariable@ data; 3) invalidity of the patent in suit based on anticipation by a single prior art reference; and 4) non-infringement based on the absence of proof of indirect infringement. Three of the motions, if decided in CompuServe=s favor, would resolve the entire action, and the Court will address those motions first. The fourth motion, relating to indirect infringement, depends on the outcome of the other three, and will be treated last.

In addition to these pending dispositive motions, the parties have filed four motions to strike. On December 13, 1999, plaintiff Charles E. Hill & Associates, Inc. (AHill®) moved to strike certain evidence relied on by CompuServe in its summary judgment motions. CompuServe responded on December 22, 1999, with a Aconditional® motion to strike certain evidence relied on by Hill, that condition being if the Court granted Hill's first motion to strike. On January 7, 2000, Hill filed two more motions to strike, one aimed at the affidavit of Andrew Johnson-Laird that was filed by CompuServe on December 22, 1999, to provide a foundation for the evidence Hill asked the Court to strike in its December 13th motion. The other was a motion to strike CompuServe's December 22, 1999, filing of three replies to Hill's responses to CompuServe's statements of material facts.

As further explained below, the Court has **DENIED** Hill's December 13th motion to strike, and its January 7, 2000, motion to strike Johnson-Laird's affidavit. As a result, CompuServe's December 22nd conditional motion to strike is deemed **WITHDRAWN**. With respect to Hill's January 7th motion to strike CompuServe's three replies, the Court has **DENIED, in part** and **GRANTED in part**, the relief sought.

I. FACTUAL AND PROCEDURAL BACKGROUND

A. Undisputed Facts¹

United States Patent No. 5,528,490, for an electronic catalog system and method, is assigned to Charles E. Hill and Associates, by the inventor, Charles E. Hill (the AHill Patent® or A490 Patent®).

¹These facts have been taken from the Court's previous *Markman* order, dated April 9, 1999, and from the parties' Joint Pre-Summary Judgment Statement filed on August 30, 1999.

Dfs.=Ex. 1, AHill Patent@ at 1. It issued on June 18, 1996, from Application Serial No. 866,867, filed with the U.S. Patent and Trademark Office on April 10, 1992. *Id.* The patented invention includes a combination of methods and corresponding apparatus whereby up-to-date information related to a selected product is transmitted from a main computer to a remote computer. >490 Patent, Abstract. It was designed Ato reduce the problems associated with@ the two common types of electronic catalog systems in existence at the time of the invention. *Id.*, Summary of the Invention, Col. 1, *ll.* 40-42. One, a Adial-up system,@ featured a remote computer at the customer=s location, with a modem, and a main computer at the vendor=s location. *Id.*, Background of the Invention, Col. 1, *ll.* 14-17. The remote computer would connect via the modem to the main computer, allowing the customer to log-on to the main computer and browse the catalog menu as a user of that computer. *Id.*, *ll.* 17-19. When the customer selected a product for which more information was needed, the information about that product would be transmitted through the modem to the customer. *Id.*, *ll.* 20-25. This system took a large amount of time to transmit graphics data over the modem, especially high-resolution graphics, which could not be transmitted Ain a meaningful time frame.@ *Id.* Because of this, the dial-up system was not practical for catalogs with text and graphics. *Id.*, *ll.* 25-26.

The other prior art system did not involve any connection between the vendor and customer computers. *Id.*, Col. 1, *ll.* 27-36. Instead, the catalog was loaded onto the customer=s computer from a disk, and periodically updated by the vendor sending new disks to the user. *Id.* Although the customer was able to view both text and graphics on his or her own computer, the disadvantage of this system was that the data was rarely up to date. AThe accuracy of the data depends on the vendor sending updated data disks to the customer. In addition, the customer must also take the time to install the latest

updated data disk onto his [or her] computer.® *Id.* For these reasons -- outdated information and delays and inconvenience involved with updating -- the totally-resident catalog system was not considered a practical alternative.

Accordingly, the electronic catalog system of the 490 invention was designed to reduce the problems of delay, inconvenience, and outdated information associated with both of these prior systems. *Id.*, Summary of the Invention, Col. 1, *ll.* 40-45. It contemplates use of software on both the customer's (remote) computer and on the vendor's (main) computer that handles all communication between the two computers. *Id.* The two computers cooperate so that the customer is provided with accurate updated catalog information each time the system is used. *Id.*, Col. 1, *ll.* 45-50. A key feature of the patented system is that it combines the techniques of a distributed data system with a parametric design system to minimize time required for a customer to access vendor's computer 12 on a real time basis.® 490 Patent, Col. 9, *ll.* 30-34. Catalog data is stored on both the remote and the main computers, with all constant and variable data being stored and maintained on the main computer, and constant data being stored on the remote computer. *Id.*, Col. 3, *ll.* 11-14.

Variable data is described as data that can change at any time.® *Id.*, Summary of the Invention, Col. 1, *ll.* 53-54. If the variable data changes, the vendor corrects the variable data entered into the main computer, and it is automatically provided to the remote computer, without the need to load new data disks onto the customer's computer.® *Id.*, Col. 1, *ll.* 65-67, Col. 2, *ll.* 1-2. The customer's computer contains all constant data related to the catalog products.® *Id.*, Col. 1, *ll.* 56-58. Constant data may include both graphics and text. *Id.*, *ll.* 58-59. When variable data is transmitted from the main computer to the remote computer, it may be accompanied by a map that allows the

remote computer Ato integrate the variable data received . . . with constant data related to the selected product stored in the customer=s computer.@ *Id.*, Col. 2, *ll.* 17-22. The Aconstant data residing on the customer=s computer and variable data downloaded from vendor=s computer@ merge to create a Acompletely updated data sheet for the selected product.@ *Id.*, Col. 2, *ll.* 23-25.

According to its summary, the Hill invention has three primary Aobjects,@ and ten Aaspects.@ 490 Patent, Cols. 1-6. The objects of the invention include, 1) providing customers with instant access to the most up-to-date product information available; 2) minimizing computer on-line time; and 3) increasing system security. *Id.*, Col. 2. The ten aspects described in the specification correlate to the method and apparatus claims of the patent. *Id.*, Cols. 3-6. A key teaching of the Hill Patent is that by partitioning information into Aconstant@ data (which may include graphics) and Avariable@ data, the system can work more efficiently and quickly to provide accurate product information. *See Hill v. CompuServe, Inc.*, IP 97-434, Jan. 6-7, 1999, Claim Construction Hearing Transcript (hereafter ATr.@), Vol. I, at 27-29. Both the constant and the variable data are stored and maintained on the vendor=s main computer, and constant data is stored on the customer=s remote computer. 490 Patent, Col. 1, *ll.* 51-55. When a customer wants to obtain information about a given product, he or she selects that product from a list that is resident on his or her computer. *Id.*, Col. 2, *ll.* 8-9. At this point the remote computer automatically calls the main computer and the catalog system compares the Arevision status@ of the constant data on the remote computer with the revision status of the constant data in the main computer memory. *Id.*, *ll.* 10-14. If any of the remote computer=s constant data is out of date, the main computer will automatically update it. *Id.*, *ll.* 14-16.

Once the constant data has been updated the main computer transmits the variable data relating to the selected product and a map that permits the remote computer to integrate the variable data with the constant data stored in the remote computer. *Id.*, *ll.* 16-22. The customer's updated constant data and the incoming variable data are then integrated to create a data sheet for the desired product, containing the most up-to-date information available. *Id.*, *ll.* 22-26. Using this system provides a customer with instant access to changes in variable data related to the products in the electronic catalog system.² *Id.*, *ll.* 30-33. In this way, the invention's object of providing for the most up-to-date information about a product is achieved. *See Id.*, *Col.* 2, *ll.* 3-7.

Another object of the invention, minimizing computer non-line time, is accomplished by two elements of the invention: 1) the system controls when a customer logs on or off the main computer; and 2) normal browsing of the catalog is accomplished on the customer's computer, on which resides all of the general catalog data.² 490 Patent, Summary, *Col.* 2, *ll.* 41-56. Not only does this prevent a customer from logging on to the vendor's computer and not logging off, but graphics and other data that change infrequently will not have to be transmitted each time a customer wants to see a product's information, reducing on-line time by 70-80%. *See Id.*, *Col.* 2, *ll.* 55-59. The third object of the invention, increasing system security,² is accomplished in part because the invention's software controls when the remote computer logs on and off the main computer, which reduces customer access to the main computer.² *Id.*, *Col.* 3, *ll.* 2-8. It is also accomplished by a system for detecting pirated copies of a serialized software program. *Id.*, *Col.* 6, *ll.* 22-54.

²None of the claims relating to the system security object of the patented invention are alleged to be infringed.

Defendant CompuServe Incorporated (ACSI@) provided certain on-line services to subscribers and to members of the general public prior to February 2, 1998, and after that date, defendant CompuServe Interactive Services, Inc. (ACIS@) took over the provision of those services. Joint Statement of Undisputed Material Facts (AJoint Statement@) & 2. The two are sometimes referred to collectively herein as ACompuServe.@ *Id.* Hill is asserting that CSI infringed prior to February 2, 1998, and from February 2, 1998, to the present, CIS has infringed the following claims of the Hill Patent: (i) independent claim 1 and its dependent claims 2-5 and 8-11; (ii) independent claim 15 and its dependent claims 16-18 and 21-26; (iii) independent claim 30 and its dependent claims 31-32; and (iv) independent claim 35 and its dependent claims 36-39 (collectively the AAsserted Claims@). *Id.* & 3. Each independent claim of the Hill Patent contains the following elements which occur on the main computer: 1) storing constant data and variable data; 2) comparing the remote revision status when retrieved from the remote computer with the revision status stored on the main computer (or in cases of Independent claims 15 and 35, comparing the constant data to the main constant data); 3) receiving the remote revision status or the remote constant data (the latter in the instances of Claims 15 and 35); 4) transmitting to the remote computer the data needed for updating the constant data; and 5) transmitting the variable data from the main computer to the remote computer. *Id.* & 23. By using the term Amain computer@ as used in the Hill Patent, the plaintiff is including the web server computers (those of CompuServe and those not owned by CompuServe) described in plaintiff's infringement claims. *Id.* & 24.

All of the Asserted Claims contain the element of Astoring constant data . . . in a memory of a remote computer (Aremote storing@). *Id.* & 5. For that reason, the first basis for summary judgment

offered by CompuServe is that its on-line services, which operate through a Web browser,³ do not infringe because there is no element of remote storing. A browser is software loaded on a personal computer (PC) that allows the PC to send and retrieve information over the Internet. *Id.* & 6. The most common browsers are Microsoft's Internet Explorer and Netscape's Navigator. *Id.* Browsers place information in certain files, retrieved from the Internet, onto a special section of the PC's hard disk cache memory so that the file can be easily accessed by the PC.³ *Id.* Microsoft calls files stored by the browser in cache memory Temporary Internet Files,⁴ while Netscape calls them Local Cache files. *Id.*

The part of the Internet known as the World Wide Web (WWW) or the Web may be accessed through cable or other communication lines. The Web consists of, among other things, individual PCs, local Internet Service Providers (ISPs), On-Line Service Providers⁴ (such as America Online (AOL), CompuServe, or Prodigy), a vast array of networked computers spanning the globe, including server computers owned or controlled by, among others, retailers for banner advertising delivery and tracking services, and Web browsers. *Id.* & 17. A browser is software loaded on a PC that implements communication and facilitates the transmission of data and files between these various networked computers. *Id.* Individuals using their home PCs typically access the information on the WWW over telephone lines by a modem. *Id.* At the request of the PC users, the local ISP or an ICP

³Memory located on a computer's hard disk is considered non-volatile, in that it is retained when the computer is shut down and will be present when it is restarted. Ex. 11, Gregor Dep. at 76; Ex. 2, Resp. by Hill to CompuServe's First Set of Interrogs. (Nos. 1-11) at 20; Ex. 5, Reply Rep. of Dr. Dunsmore, && 15-16.

⁴On-Line Service Providers are referred to as Internet Content Providers (ICPs) by the

provides a communication path to other computers on the WWW. *Id.* The ICPs also provide certain proprietary *A*content[@] or information services, and allow access to other parts of the WWW by use of the browser, which communicates or browses the WWW to find specific information. *Id.*

The browser software communicates through the Internet with *A*server computers[@] containing information (whether or not related to products) requested by the PC user and allows the user to review the information by presenting the information as a *A*screen[@] or *A*page[@] that appears on the PC monitor.

Id. & 18. Pages are *A*HTML[@] documents, documents written in accordance with a certain uniform programming format so they can be accessed and transmitted by the communication software. *Id.*

*A*HTML[@] stands for hypertext mark-up language, which is a language adopted by computer programmers to create *A*pages[@] in a uniform manner so that the information can be accessed by the communication language between networked computers. *Id.* The communication language currently in use is called *A*HTTP[@], or hypertext transfer protocol. *Id.*

The Web was developed in the late 1980s and early 1990s by the W3 Organization, an organization affiliated with the Computer Sciences Department at Massachusetts Institute of Technology, and other groups and international standards committees. *Aff. of CompuServe Vice-President Elizabeth Sibbring (ASibbring Aff.)* & 3. The W3 Organization and one of its pioneers, Tim Berners-Lee, worked for years to create the modern Web, which today consists of an interconnected network of computers. *Id.* The Web browser technology and Internet protocols and methods used to communicate via the Web existed and were in wide use by June 18, 1996, when the Hill Patent issued.

parties. Joint Statement & 17.

Id. Anyone with a PC may access the Web as long as the PC has a Web browser and the user has an Internet access account with an Internet Access Provider, such as AOL, CompuServe or Prodigy, or a local ISP. Joint Statement & 17.

Information on the WWW is organized and located on Web sites having specific addresses, such as <http://www.cnn.com>. Joint Statement & 20. When visiting a Web site, a user typically first views a home page, containing general information about the site. *Id.* Pages with more specific information are reached by clicking on the information category of interest on the home page. *Id.* Each page of a Web site is an HTML document. *Id.* HTML documents consist of text files, in-line image files adopted by reference, and instructions as to the location of text and graphics files within the HTML document for display on the PC's monitor. *Id.* & 19. The WWW delivers HTML documents to a PC by using the HTTP communication protocol. *Id.*

In early 1997, CompuServe switched its on-line shopping services to a Web-based technology. *Sibbring Aff.* & 3. Prior to switching to the Web, CompuServe had offered its on-line shopping through a completely proprietary system. *Id.* Now, CompuServe's on-line services use and access pages that conform to WWW standards (used by the W3 Organization) for the delivery of Web-based content. Joint Statement & 19. This includes use of Active Server Page (ASP) files, which facilitate the combining of content or objects to create a page. *Id.* & 20. ASP files are sent every time the browser requests that updated files be sent by the main computer or Web server to the remote computer or user's PC, unless the ASP file contains a Last-Modified header (and the page has not been modified), an Expires header (and the number of minutes specified have not elapsed), or an Expires-Absolute header (and the date and time specified are still in the future). *Id.* & 16. Files with a Last

Modified Unknown (Internet Explorer) or Last Modified None (Netscape) Adate@ are sent every time the browser accesses a Web page from a Web server containing the files. *Id.* & 15.

Prior to the time CompuServe began using Web-based protocols and technology for its on-line services, it received transaction fees whenever its members bought products or services through CompuServe's proprietary servers, which were the servers used before CompuServe switched to the WWW. *Id.* & 27. Now, CompuServe derives revenue from its shopping service in a variety of ways, one of which is when retailers pay CompuServe a monthly fee for simply having a link from the CompuServe shopping site to the retailer's site. *Id.* & 28. Another is when retailers pay CompuServe a combination of a fixed fee and a percentage of sales generated to CompuServe members. *Id.* In addition, advertisers pay CompuServe a fee based on the number of times a particular CompuServe Web page on which their ad appears is accessed by people using the WWW. *Id.*

Hill asserts that the following Web sites infringed the Asserted Claims in the past:

- a) <http://mall.compuserve.com/mall/index.asp>
- b) http://www.compuserve.com/member_specials
- c) http://mall.compuserve.com/mall/spring_catalog
- d) <http://mall.compuserve.com/mall/index.asp/mall/apparel.htm>

Joint Statement & 21. In addition, Hill contends that the following Web sites infringe the Asserted Claims as of August 5, 1998, and to the extent still active, to the present:

- a) <http://www.compuserve.com/shopping> (still active)
- b) <http://www.compuserve.com/shopping/booksmusic.asp> (inactive)
- c) <http://www.compuserve.com/shopping/apparel.asp> (still active)
- d) Indirect Alinks@ from, e.g., <http://www.intimo.com> (inactive)
- e) <http://www.computingshop.com> (inactive).

Id. Hill also refers to the operation of Web browsers as an allegedly infringing activity. *Id.* & 22.

Web browsers place information in files onto, and have the ability to retain files in, a PC's "Cache" section of hard disk memory created by the browser. *Id.* ¶¶ 6, 10. Documents or pages in a browser's cache are subject to being automatically deleted or removed by the browser if necessary to make room for more recently accessed data. *Id.* ¶ 7. This means the data in the cache is subject to being deleted or removed by the browser from the user's PC without the user's issuing a "Delete" command, such as by clicking on a delete button or on a delete scroll-down menu. *Id.* The user may or may not be aware that data is being removed by the browser. *Id.* When a user of a PC "visits" (retrieves from the Internet and displays a page on his or her monitor) a page for the very first time, the constant data revision status is not transmitted by the remote computer to the main computer, and there is no comparing of the constant data or updating it. *Id.* ¶ 8. Since June 18, 1996, CompuServe has packaged Microsoft's browser software known as Internet Explorer with its software. *Id.* ¶ 9.

As of February 2, 1998, AOL owns one hundred percent of CompuServe. *Id.* ¶ 11. On August 19, 1999, the "Welcome" screen for AOL included a hyperlink labeled "Improve Your Computer's Performance." *Id.* Clicking on this hyperlink caused the following text to appear on the screen:

Your Web browser comes with a cache, or temporary storage place. When you visit a Web page the images and text are stored on your hard drive. This allows the pages to load more quickly the next time you visit. However, as your cache fills up, your computer's performance can slow down.

Id. The text concluded with instructions on "How to Empty Your Browser's Cache." *Id.*

CompuServe's browser software, Internet Explorer, comes with a default setting for the disk cache memory of two percent (2%) of the available disk space. *Id.* ¶ 12. This setting can be modified to

increase or decrease the size of the disk cache memory. *See* Ex. 11, Gregor Dep. at 63.

B. Procedural Posture

The parties have chosen to bifurcate the process of determining whether CompuServe's accused services infringe the Hill Patent. On January 6-7, 1999, a two-day *Markman* hearing was held, following which the Court issued a fifty-four page *Markman* ruling, dated April 9, 1999 (*Markman Order*). In that ruling, the Court construed the meaning of seven disputed claim terms and addressed the issue of whether the steps of the claimed method must be performed in the exact order recited in the claims. Claim construction is the first step of a two-part inquiry to determine whether infringement has occurred.

The second part of the inquiry, determining whether the properly-construed claims read on the accused method, is further segregated by the parties into three summary judgment motions. The fourth summary judgment motion relates to a counterclaim brought by CompuServe, seeking a declaratory judgment that the Hill Patent is invalid. CompuServe has suggested that the Court need not address all of the pending motions if it finds non-infringement, for example, on the basis of one of the proposed grounds.⁵ As Hill observed, if the Court were to resolve only one of the four motions, and that ruling was appealed and overturned, the case would be remanded for consideration of the other motions.

⁵Specifically, in its motion based on the alleged absence of storing, CompuServe wrote, A[t]he instant motion is case dispositive. A second summary judgment motion of non-infringement . . . and a third motion demonstrating the patent's invalidity, are being contemporaneously filed, but need not be addressed if the instant motion is granted. Mem. in Supp. of Defs.'s Mot. for Sum. J. Based on the Absence of Storing on the Remote Computer at 1.

This piecemeal approach would be an inefficient use of judicial resources and CompuServe's invitation to bifurcate the Court's summary judgment rulings is declined. In this order, the Court has addressed each of the pending motions for summary judgment, using the standards that follow.

II. STANDARDS

A. Summary Judgment

Summary judgment is granted if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law. Fed. R. Civ. P. 56(c). An issue is genuine only if the evidence is such that a reasonable jury could return a verdict for the opposing party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A disputed fact is material only if it might affect the outcome of the suit in light of the substantive law. *Id.*

The moving party has the initial burden to show the absence of genuine issues of material fact. *See Schroeder v. Barth*, 969 F.2d 421, 423 (7th Cir. 1992). This burden does not entail producing evidence to negate claims on which the opposing party has the burden of proof. *See Green v. Whiteco Indus., Inc.*, 17 F.3d 199, 201 & n.3 (7th Cir. 1994). The party opposing a summary judgment motion bears an affirmative burden of presenting evidence that a disputed issue of material fact exists. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986); *Scherer v. Rockwell Int'l Corp.*, 975 F.2d 356, 360 (7th Cir. 1992). The opposing party must go beyond the pleadings and set forth specific facts to show that a genuine issue exists. *See Hong v. Children's Mem. Hosp.*, 993 F.2d 1257, 1261 (7th Cir. 1993), *cert. denied*, 511 U.S. 1005 (1994). This

burden cannot be met with conclusory statements or speculation, *see Weihaupt v. American Med. Ass'n*, 874 F.2d 419, 428 (7th Cir. 1989), but only with appropriate citations to relevant admissible evidence. *See* Local Rule 56.1; *Brasic v. Heinemann's Inc., Bakeries*, 121 F.3d 281, 286 (7th Cir. 1997); *Waldridge v. American Hoechst Corp.*, 24 F.3d 918, 923-24 (7th Cir. 1994). Evidence sufficient to support every essential element of the claims on which the opposing party bears the burden of proof must be cited. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

In considering a summary judgment motion, a court must draw all reasonable inferences in the light most favorable to the opposing party. *Spraying Sys. Co. v. Delavan, Inc.*, 975 F.2d 387, 392 (7th Cir. 1992). If a reasonable fact finder could find for the opposing party, then summary judgment is inappropriate. *Shields Enters., Inc. v. First Chicago Corp.*, 975 F.2d 1290, 1294 (7th Cir. 1992). When the standard embraced in Rule 56(c) is met, summary judgment is mandatory. *Celotex Corp.*, 477 U.S. at 322-23; *Shields Enters.*, 975 F.2d at 1294.

B. Patent Infringement

There are three ways in which a person can be held liable for patent infringement. First, a person who without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent. 35 U.S.C. § 271(a). This provision of the patent statute governs instances of *direct* infringement of a patent, either literally or by equivalents. *See Joy Technologies, Inc. v. Flakt, Inc.*, 6 F.3d 770, 773 (Fed. Cir. 1993). Second, an alleged infringer could be found liable for actively inducing direct infringement by others, which is an *indirect* infringement. *See* 35 U.S.C. § 271(b). Finally, a person may indirectly infringe by knowingly providing

components of a patented machine, combination, or material or apparatus for use in a patented process, thereby contributing to the direct infringement of the patent by others. *See* 35 U.S.C. § 271(c). All three types of infringement, however, lead to a judgment of liability. *See Serrano v. Telular Corp.*, 111 F.3d 1578, 1584 (Fed. Cir. 1997) (although court erred in finding direct infringement, error was harmless because the accused device contributorily infringed claim).

Liability for indirect infringement, however, depends on the existence of direct infringement. *Kendall Co. v. Progressive Medical Tech., Inc.*, 85 F.3d 1570, 1573 (Fed. Cir. 1996) (citing *Aro Mfg. Co. v. Convertible Top Replacement Co, Inc.*, 365 U.S. 336, 341 (1961)); *see also Arthur A. Collins, Inc. v. Northern Telecom Ltd.*, 216 F.3d 1042, 1048 (Fed. Cir. 2000), *reh'g denied* Aug. 1, 2000; *Serrano*, 111 F.3d at 1583. In some cases, the patentee accuses the alleged infringer of both direct and indirect infringement, and the court has found no direct infringement while acknowledging that its ruling did not preclude finding that the defendant induced or contributed to infringement of the patent. *See, e.g., IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1437 (Fed. Cir. 2000); *Serrano*, 111 F.3d at 1584; *Joy Tech., Inc.*, 6 F.3d at 773. Nevertheless, the plaintiff must still prove the existence of direct infringement, even if not by the defendant. For example, in *IMS Technology*, the court affirmed the district court's ruling of no direct infringement by the defendant's systems, noting the absence of a claimed storage device to perform the function of transferring and recording data. 206 F.3d at 1437. The defendant, however, could still be liable for inducing or contributory infringement, the court wrote, if one of its customers connected its system to an external storage device. *Id.*

Ordinarily, to prove infringement of a patent, the plaintiff must show by a preponderance of the evidence that every limitation of the claim asserted to be infringed has been found in an accused device

or process, either literally or by an equivalent. *Becton Dickinson and Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 796 (Fed. Cir. 1990); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 935 (Fed. Cir. 1987), *cert. denied*, 108 S. Ct. 1226 and 108 S.Ct. 1474 (1988). With a method or process patent, however, the focus is on whether all of the claimed steps of the process or method are performed, either as claimed or by an equivalent step. *EMI Group North Amer., Inc. v. Intel Corp.*, 157 F.3d 887, 896 (Fed. Cir. 1998), *cert. denied*, 526 U.S. 1112 (1999); *Williams Gold Ref. Co. v. Semi-Alloys Inc.*, 434 F. Supp. 453, 454 (W.D.N.Y. 1977) (It is the series of steps comprising the process that is central and only a replication of every step . . . constitutes infringement). This is because a method or process patent is only infringed when the alleged infringer practices or performs the claimed method or process. *See Joy Tech.*, 6 F.3d at 775; *Giese v. Pierce Chemical Co.*, 29 F. Supp.2d 33, 36 (D. Mass. 1998).

The determination of infringement requires two steps. First, the court must interpret the disputed claims, from a study of all relevant patent documents, to determine their scope and meaning. *Dolly, Inc. v. Spalding & Evenflo Companies, Inc.*, 16 F.3d 394, 397 (Fed. Cir. 1994); *Becton*, 922 F.2d at 796. Second, the court must determine if the accused device, system or method comes within the scope of the properly construed claims. *Dolly*, 16 F.3d at 397; *Smithkline Diagnostics v. Helena Laboratories Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988). Infringement of process inventions is subject to the <all-elements rule> whereby each of the claimed steps of a patented process must be performed in an infringing process, literally or by equivalent of that step, with due attention to the role of each step in the context of the patented invention. *Canton Bio-Medical, Inc. v. Integrated Liner Tech., Inc.*, 216 F.3d 1367, 1369 (Fed. Cir. 2000).

The purpose of claim construction is to elaborate the normally terse claim language in order to explain and understand, but not change, the scope of the claim. *Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 1580 (Fed. Cir. 1991). Unless evidence pertinent to the interpretation of a claim is in dispute, claim interpretation may be resolved by the court as a matter of law. *Markman v. Westview Inst., Inc.*, 517 U.S. 370, 387 (1996); *Markman v. Westview Inst., Inc.*, 52 F.3d 967, 970 (Fed. Cir. 1995); *Lantech, Inc. v. Keip Mach. Co.*, 32 F.3d 542, 546 (Fed. Cir. 1994); *Becton*, 922 F.2d at 796. ¶To determine the intended meaning of a claim, [courts] look to the claim language in context of the specification and the prosecution history.¶ *Lantech*, 32 F.3d at 546. When the meaning of key terms of the claim is in dispute extrinsic evidence, including testimony of witnesses, may be used and reference may be had to the specification, the prosecution history, the prior art and other claims, may be used. *Scripps*, 927 F.2d at 1580.

Absent a finding of literal infringement, a court could find that an accused device infringes by applying the judicially-created equitable doctrine of equivalents. *Becton*, 922 F.2d at 797; *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1581 (Fed. Cir. 1988); *Pennwalt*, 833 F.2d at 934.

Under this doctrine, an accused device may infringe a claim ¶if it performs substantially the same function in substantially the same way to obtain the same result.¶ *Becton*, 922 F.2d at 797 (citing *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950)). With method or process patents, the plaintiff must demonstrate the ¶unauthorized performance of substantially the same process steps in substantially the same way to accommodate substantially the same result.¶ *Mooney v. Brunswick Corp.*, 663 F.2d 724, 736 (7th Cir. 1981). In fact, a method patent is not dependent on the form of apparatus used, and infringement is not avoided by making only slight changes in the

apparatus disclosed in the patent. *CMI Corp. v. Metropolitan Ent., Inc.*, 534 F.2d 874, 881 (10th Cir. 1976).

Courts limit the doctrine of equivalents, however, by refusing to extend it to cover the prior art, or to allow the patentee to recapture, through equivalence, what was abandoned during prosecution of the patent. *Conroy v. Reebok Intern. Ltd.*, 14 F.3d 1570, 1576-78 (Fed. Cir. 1994); *Pennwalt*, 833 F.2d at 934, n.1. Moreover, application of the doctrine of equivalents does not allow a court to erase or ignore claim limitations. *Conopco, Inc. v. May Dept. Stores Co.*, 46 F.3d 1556, 1562 (Fed. Cir. 1994), *cert. denied*, 514 U.S. 1078 (1995) (citing *Pennwalt*, 833 F.2d at 935); *Dolly*, 16 F.3d at 398.

III. DISCUSSION

Having been presented with four alternative motions for summary judgment, the Court must resolve them in some logical order. The first two relate to the absence of claim elements in CompuServe's allegedly infringing system, either literally or by equivalents, and the Court will resolve them before turning to an analysis of the patent's validity. As storing is one of the first claim terms mentioned in any of the claims at issue, the motion based on its alleged absence will be addressed first. Next, the Court will consider the motion regarding the classification of constant and variable data as claimed by the patent and construed by the Court. This motion also seeks at least partial summary judgment on grounds that CompuServe's system does not compare constant data, as required by Claims 15 and 35 of the Hill Patent.

The third motion that will be considered is the one claiming that Hill's patent is invalid because it was anticipated by a single prior art reference, U.S. Patent Number 5,347,632, titled a "Reception System for an Interactive Computer Network and Method of Operation." Ex. 18 (the "Prodigy Patent"). CompuServe specifically claims that only one prior art reference anticipated Hill's patent, so the Court will not include a discussion of obviousness in its validity analysis. Finally, the Court will determine whether sufficient evidence has been presented to bring the issue of indirect infringement before a jury. Before considering any of these dispositive motions, however, the Court must determine what evidence and documents on which to rely, in light of the parties' four motions to strike. It is to that determination that the Court now turns.

A. Motions to Strike

Four motions to strike have been filed in this matter. According to Rule 12(f) of the Federal Rules of Civil Procedure:

[U]pon motion made by a party within 20 days after the service of the pleading upon the party or upon the court's own initiative at any time, the court may order stricken from any pleading any insufficient defense or any redundant, immaterial, impertinent, or scandalous matter.

Generally, motions to strike are considered a drastic remedy, and are strongly disfavored. *Western Pub. Co., Inc. v. MindGames, Inc.*, 944 F. Supp. 754, 755, n.1 (E.D. Wis. 1996), *aff'd* 218 F.3d 652 (7th Cir. 2000) ("information will not be stricken unless it is evident that it has no bearing upon the subject matter of the litigation"); *Federal Nat'l Mortgage Ass'n v. Cobb*, 738 F. Supp. 1220, 1224

(N.D. Ind. 1990). Accordingly, such motions are ordinarily not granted unless the language in the pleading at issue has no possible relation to the controversy and is clearly prejudicial. @ *Cobb*, 738 F. Supp. at 1224.; *Abdulrahim v. Gene B. Glick Co.*, 612 F. Supp. 256, 260 n.1 (N.D. Ind. 1985). A trial court, however, has discretion to grant a well-taken motion to strike. *Mirshak v. Joyce*, 652 F. Supp. 359, 370 (N.D. Ill. 1987); *F.D.I.C. v. Niblo*, 821 F. Supp. 441 (N.D. Tex. 1993).

Motions, briefs, affidavits, and evidentiary matters submitted in support of, or in response to, a motion for summary judgment are not pleadings@ within the meaning of Rule 12(f). See *Sellers v. Henman*, 41 F.3d 1100, 1101 (7th Cir. 1994) (affidavits are not pleadings); *York v. Ferris State Univ.*, 36 F. Supp.2d 976, 980 (W.D. Mich. 1998) (same); *Meredith v. Allsteel, Inc.*, 814 F. Supp. 657, 660 (N.D. Ill. 1992) (Rule 12(f) permits motions to strike matters at the pleading stage, not at the summary judgment stage); see also *Hrubec v. National Railroad Pass. Corp.*, 829 F. Supp. 1502, 1506 (N.D. Ill. 1993) (courts are unwilling to construe Apleading@ so broadly as to include motions and their accompanying memoranda). Although some courts have used Rule 12(f) to strike affidavits or other evidentiary matters, such a practice is inconsistent with the Federal Rules of Civil Procedure. *International Longshoremen's Assoc. v. Virginia Intern. Term., Inc.*, 904 F. Supp. 500, 504 (E.D. Va. 1995) (noting that Fed. R. Civ. P. 7(a) defines pleadings as complaints, answers and replies to counterclaims). The better practice is for a moving party to supply the court with some other basis in the Federal Rules for striking filings that are not pleadings. See *Lombard v. MCI Telecomm. Corp.*, 13 F. Supp.2d 621, 625 (N.D. Ohio 1998) (suggesting that courts are to disregard inadmissible evidence, not strike it). Nevertheless, at any time that a court is presented with exhibits that are hearsay, not based on personal knowledge, irrelevant or otherwise inadmissible, it may exclude such

exhibits from its consideration of a dispositive motion. *Id.*

Rule 56(e) requires that affidavits supporting or opposing a motion for summary judgment be made on personal knowledge, and set forth facts that would be admissible in evidence, and show affirmatively that the affiant is competent to testify to the matters presented. Fed. R. Civ. P. 56(e). Although the evidence presented in opposition to or support of a summary judgment does not have to be in admissible form, it must be admissible in content. *See Winskunas v. Birnbaum*, 23 F.3d 1264, 1267-68 (7th Cir. 1994) (evidence must be of evidentiary quality, meaning that a change in form but not in content would make the evidence admissible at trial). For example, exhibits to a summary judgment motion may include attested testimony, such as depositions or affidavits, even though at trial oral testimony ordinarily would be substituted for the affidavit or deposition. *Id.* at 1267. Thus, if the grounds for asking the court to exclude or disregard motions, briefs, or evidentiary matters relate to this or another rule of procedure or evidence, such rule should be cited to the court.

Hill has filed two motions to strike evidentiary matters offered by CompuServe. The first targets excerpts from the *Microsoft Internet Explorer 4 Book*, Exhibit 9 offered by CompuServe in support of summary judgment on the basis of the absence of storing. According to Hill, this exhibit should be excluded because it is vague and conclusory. Hill's Mot. to Strike Cert. Alleged Evid. ¶ 3. The most troublesome aspect for Hill about the book is the statement about the Internet Explorer browser's cache memory filling up quickly, which Hill asserts is also conclusory and vague as to be meaningless. *Id.* In support of this argument, Hill cites a section of a procedural treatise for the proposition that conclusory facts . . . cannot be utilized on a summary judgment motion. *Id.* (citing 10B CHARLES A. WRIGHT, *et al.*, FEDERAL PRACTICE AND PROCEDURE ¶ 2738, at 346-56 (3d ed. 1998)).

The sentence immediately preceding the cited text in this treatise makes it clear that the quoted statement is referring to the content of an affidavit, not to documentary evidence, such as the Microsoft manual. *Id.* at 345 (A Rule 56(e) further limits the matter to be properly included in an affidavit to facts . . . @). A clause at the beginning of that sentence indicates the writer was addressing limitations A in addition to the admissibility requirements@ that had just been discussed. *Id.* (A In addition to the admissibility requirements just discussed, Rule 56(e) further limits. . . @). Considered in context, the quoted statement from WRIGHT & MILLER indicates that conclusory facts are not necessarily inadmissible. *Id.* Nor did Hill cite a particular Federal Rule that supports striking this evidence on the basis of vagueness or being conclusory, and the Court cannot discern one. Instead, the consequence of submitting Avague or conclusory@ evidence is that it will not suffice to oppose the adequately-supported factual allegations by the opposing party, or to create a genuine issue of material fact, and summary judgment may be entered against the proponent of such evidence. *See* Fed. R. Civ. P. 56(e).

Hill's second argument for striking this exhibit is that it is hearsay and does not meet any of the hearsay exceptions. Hill's Mot. to Strike, ¶ 5. The challenged statement comes from a handbook or manual purporting to instruct users of the Internet Explorer software about its attributes and use. In the context of explaining how to increase the size of the cache that is set up by the browser, the author stated that the cache Afills up quickly.@ Ex. 9, *Microsoft Internet Explorer 4 Book* at 104. To the extent that CompuServe offers excerpts from the Microsoft publication as proof of the statements made therein, they should be considered hearsay. Fed. R. Evid. 801(c). The only hearsay exception within which such statements could fall is the Alearned treatises@ exception, which allows Astatements contained in published treatises, periodicals, or pamphlets on a subject of . . . science@ to be read into evidence.

Fed. R. Evid. 803(18). For such hearsay to be admissible, an expert must have relied on the statements and vouched for the reliability of the publication. *Id.* According to Hill, the excerpts from the Microsoft book were not submitted as an exhibit to an expert's report or affidavit, and therefore they do not overcome the hearsay objection. *See* Fed. R. Evid. 703, 803(18); Hill Mot. to Strike & 7.

In response, CompuServe points to language in the parties' Joint Pre-Summary Judgment Statement indicating an agreement that they can rely on any evidence contained in any of the exhibits referenced in this Pre-Summary Judgment statement. Joint Statement at 52. The Microsoft publication was referenced in the Joint Statement. Because of this agreement, CompuServe thought it could rely on the Microsoft publication in support of its summary judgment motion, and that Hill would not object to its admissibility. Def.'s Mem. in Oppos. to Hill's Mot. to Strike Certain Evid. at 4. Although acknowledging the ambiguity of the word "rely" in the parties' agreement, Hill rejoins that the parties intended that either could cite any evidence in the exhibits in the Joint Pre-Summary Judgment Statement, not that it was all admissible. Hill's Reply Brf. in Supp. of Mot. to Strike at 4. As support for this interpretation, Hill points to the fact that the parties had segregated their Joint Statement of facts into three sections, one that is joint, one controlled by CompuServe, and one by Hill. *Id.* According to Hill, if the parties had agreed that all fifty-three exhibits were admissible, then they would not have needed separate sections. *Id.*

Hill's argument leads to some confusion. For the parties to agree, for purposes of a motion for summary judgment, not to challenge the admissibility of each other's evidence, does not mean they agree to its accuracy, validity, relevance, or to the inferences that could be drawn therefrom. It is entirely possible for a plaintiff and defendant to point to the same piece of evidence and draw different

conclusions from it about the facts it supports. Thus, it is not surprising that the Joint Statement contained a separate section for the material facts as CompuServe sees them, and one for Hill's alleged facts. Hill's explanation for its interpretation of the Joint Statement's agreement does not lead to logical harmony. In fact, it creates disharmony. Juxtaposed with the disputed agreement language is a passage by which the parties specifically reserved "the right to present additional facts in support of or in opposition to *any motion for summary judgment*." Joint Statement at 52 (emphasis added). Not only does this passage suggest that the reference to relying on exhibits noted in the Joint Statement meant relying on them in connection with a summary judgment motion, it also indicated the agreement was not meant to limit the parties only to those exhibits. They concluded by stating, "[i]n order to avoid burdening the Court with documents at this time, exhibits referenced to herein above shall be filed along with any summary judgment motions that are served and fully briefed." *Id.* Again, this language suggests that the parties were not just referring to the exhibits that could be cited in the Joint Statement, but to the exhibits they contemplated using with their summary judgment filings.

Nevertheless, given that the language of the Joint Statement is less than clear, the Court is disinclined to interpret it as an express manifestation that the parties had agreed not to challenge the admissibility of each other's exhibits for purposes of summary judgment, although such an interpretation is certainly a reasonable one. That CompuServe drew such a conclusion explains why it submitted the Microsoft publication independent of its expert's report or affidavit. When responding to Hill's motion to strike the exhibit, CompuServe acted quickly to remedy the defect by attaching an affidavit from its expert, Andrew Johnson-Laird (AJohnson-Laird@), in which Johnson-Laird quoted the excerpted language and opined on its accuracy. Aff. of Andrew Johnson-Laird, Dec. 20, 1999, §§ 5, 6. In light

of the ambiguity of the parties' agreement about the exhibits, the reasonableness of CompuServe's understanding, and the fact that such an interpretation could lull a party into submitting a software manual without including an affidavit establishing its foundation, the Court finds that CompuServe has adequately overcome Hill's hearsay objection to this exhibit. Hill's motion to strike Exhibit 9, the *Microsoft Internet Explorer 4 Book*, is **DENIED**.⁶

Among the other evidence targeted by Hill's motion to strike are three paragraphs in the affidavit of Douglas L. House (AHouse@), the Managing Director of CompuServe Interactive Services, Inc.'s Production and Design Team. Ex. 42, House Aff. ¶ 1. The reason offered for striking paragraph eight from this affidavit is that it is Ahopelessly vague and conclusory.@ Mot. to Strike ¶¶ 8-9. That paragraph stated that Acurrent Web pages are typically in multimedia form and contain much more data than Web pages of five years ago.@ Ex. 42, House Aff. ¶ 8. Hill particularly objects to the fact that the specific quantity of data on current Web pages compared to those from five years ago cannot be determined based on House's statement. As a result, Hill claims that House's statement cannot prove the fact for which it is offered -- that current, presumably larger, caches fill up just as quickly as before - - and consequently, it is so vague and conclusory as to be inadmissible.

Just as with the statement from the Microsoft publication, House's statement about the relative

⁶Hill also filed a motion to strike the affidavit of Andrew Johnson-Laird that CompuServe produced to overcome any hearsay problems with the Microsoft publication. The grounds for the motion are that the affidavit was not referenced in the parties' Joint Pre-Summary Judgment Statement, as required by the case management plan, nor was it served on Hill along with initial motion for summary judgment. Under the circumstances, however, the Court will excuse the irregularity and untimeliness represented by CompuServe's filing of the Johnson-Laird affidavit with its reply brief. Hill's motion to strike the affidavit of Andrew Johnson-Laird is **DENIED**.

size of Web pages is not inadmissible even if the Court were to find it vague or conclusory. At the least, its character might subject it to cross-examination that would affect the weight given it by a jury, and at most, it may not even suffice to create a genuine issue of material fact that would get to a jury. In either case, the consequence of its alleged vagueness is not inadmissibility.

Hill takes issue with two other paragraphs from House's affidavit for violating the rule that affidavits must be *made on personal knowledge* and must *show affirmatively that the affiant is competent to testify to the matters stated therein.* Fed. R. Civ. P. 56(c). The statements in paragraphs six and seven about how third parties design their Web sites, Hill argues, are not accompanied by foundational facts demonstrating House's competence to testify about such matters. Hill is mistaken. The affidavit contains several facts that would establish a foundation for House's personal knowledge of the work of third parties. First, the affidavit begins with House's statement that he is testifying, *having been first duly sworn, and having personal knowledge of the matters stated herein.* Ex. 42, House Aff. at 1. Second, he described fifteen years of experience working in CompuServe's interactive services division, the last three of which he spent as the Managing Director of CompuServe's Production and Design Team. *Id.* & 1. In that position, he is responsible for *overseeing the release and publication of the content on [CompuServe's] on-line services,* *Id.*, and maintaining the *shopping Web sites available through [CompuServe].* *Id.* & 2. Finally, in the accused paragraphs House stated that as managing director of the Production and Design Team, he *frequently work[s] with vendors= Web page designers . . . to ensure that the content and design of [CompuServe's] own Web sites accommodate the needs and preferences of those vendor=s.* *Id.* & 6. Through this work, House claims he has developed a *personal understanding of the factors that drive the design of vendors= Web sites and the*

techniques that those designers use to build and design their Web pages.@ *Id.*

All of these facts combined invite the reasonable inference that House has acquired personal knowledge about the design elements, techniques, needs and preferences of CompuServe's vendors, the third parties to which his affidavit referred. As CompuServe identified for the Court, the rules of evidence allow a lay witness to give opinions or draw inferences as long as they are rationally based on his or her perception and are helpful to a clear understanding of his or her testimony or determination of a fact in issue. Fed. R. Evid. 701. When a witness testifies as to matters on which he or she has personal knowledge developed through his or her own work, such testimony is admissible. *See United States v. Fidelity and Dep. Co. of Md.*, 986 F.2d 1110, 1118 (7th Cir. 1993). Here, House was testifying about the design of third parties' Web pages based on what he observed and knew from working with those designers and their designs. Hill was looking for more, however, and argues that House did not show that he had personal knowledge of the thought processes of these third parties while they designed their web pages.@ Hill's Mot. to Strike, ¶ 10. The Court is not convinced that such knowledge is necessary to show that House is competent to testify about the bases upon which CompuServe's vendors design their Web pages. For these reasons, Hill's motion to strike certain paragraphs of House's affidavit is **DENIED**.

For similar reasons, Hill's objection to the admissibility of the testimony of Mark G. Gregor (AGregor@), CompuServe's Manager of Product Production, cannot be sustained. Hill pointed to Gregor's deposition testimony and argued that it makes clear that Gregor did not have personal knowledge of the facts asserted in his affidavit about how CompuServe or third parties design their Web pages. Hill's Mot. to Strike ¶ 11. Upon a review of that testimony, the Court learned that within

the department Gregor managed was found the Production and Design Team, managed by House. Ex. 11, Gregor's Dep. at 86. As already noted, that design group is responsible for maintaining the content of CompuServe's on-line shopping services. Its manager, House, works with the Web page designers for vendors, and is familiar with their design goals. Gregor's duties as manager of Product Production include managing the building of content for CompuServe's on-line content services. Ex. 7, Gregor Aff. & 1.

The deposition testimony alleged by Hill to demonstrate Gregor's lack of personal knowledge includes a response to a question about who would have designed a specific page. Gregor stated, "I don't know the exact person but it would have come out of the design group." *Id.* at 88-89. He explained that the design group decides where to use graphics on the Web pages, after design meetings held between the designer and a builder from Product Production. *Id.* at 89-90. Both of these groups fall within Gregor's area of management. At another point, Gregor described a specific Web page as being designed by the "Adesign group." *Id.* at 97. Another question about how a vendor's Web page "came to be designed," drew the response by Gregor that he did not know as the vendor is a separate company. *Id.* at 134. Yet, he subsequently explained that he just did not want to speak for the vendor who created the page, and that the page would have been designed as he described in paragraph ten of his affidavit. *Id.* at 158. Finally, referring to a specific Web page, Gregor stated that based on his experience he knew "generally" how this kind of page was "put together." *Id.* at 157-58.

At most, Gregor's deposition testimony reveals that he was not directly involved in designing Web pages for CompuServe, just that the design group was a part of the department he managed. It also reveals that he did not claim to have knowledge about the specific design of certain Web pages, but

described the collaboration that occurred between the designers and the builders. Rather than demonstrating that Gregor had no basis for personal knowledge of Web page design, these facts tend to show that he had oversight of designers, builders and the design group, but he could not identify the specific designer of a page by looking at the design. This testimony does not provide a reason to strike Gregor's affidavit statements about how CompuServe and third parties design their Web pages. As with House, it is not necessary that Gregor actually designed the Web pages he was shown in order for him to have a basic knowledge about how such pages are designed. At the time of his affidavit, Gregor had been involved with building the content for CompuServe's on-line content services for five years. Ex. 7, Gregor Aff. & 1. It is reasonable to infer that his experiences familiarized him with the design, construction and operation of CompuServe's "shopping services," as well as other on-line shopping services, through which customers could purchase products on the WWW. *Id.* Again, the deposition testimony to which Hill alludes does not provide grounds to strike anything to which Hill objected in Gregor's affidavit. Hill's motion to strike portions of Gregor's affidavit is **DENIED**.

CompuServe filed a "conditional" motion to strike certain evidence offered by Hill, to be considered only if the Court granted Hill's motion to strike "certain alleged evidence." Specifically, CompuServe stated it would object on similar grounds to certain affidavit statements of Hill's expert, H. E. Dunsmore, Ph.D. ("Dr. Dunsmore"), if the Court were to strike the Microsoft publication and portions of the House and Gregor affidavits. Mem. in Supp. of Def.'s Cond. Mot. to Strike at 5. However, should the Court not strike these pieces of evidence, CompuServe stated that its conditional motion should be considered withdrawn. *Id.* at 4. Because the Court has **DENIED** Hill's motion to strike certain alleged evidence, it will consider CompuServe's December 22, 1999, conditional motion

to strike **WITHDRAWN**.

The last motion to strike asks the Court to disregard three Areplies,@ filed by defendant CompuServe on December 22, 1999, to Hill's responses that were filed on December 10, 1999, to CompuServe's statements of material facts in relation to its three summary judgment motions. According to Hill, the replies do not comply with Local Rule 56.1 in that they consist of legal argument rather than Aconcise, numbered sentences . . . limited as far as practicable to a single factual proposition.@ S.D. Ind. L.R. 56.1(f). Also, Hill contends that two of the three Areplies@ are duplicative, and that some of the alleged facts are not supported with citations to evidence. In response, CompuServe recites the entire history of the summary judgment briefing in this matter, beginning with a February 1999 pretrial conference in which the Court and counsel discussed the applicability of 1998's Local Rule 56.1, given that it was just amended in 1999. According to CompuServe, the Court told the parties to follow the 1998 rule and file a joint pre-summary judgment statement, which they did on August 30, 1999. Correspondingly, CompuServe's briefs in support of its three motions for summary judgment contained fact sections that cited paragraphs in the Joint Statement, rather than following the 1999 Local Rule's requirement of separately-numbered paragraphs with citations to the evidence supporting each fact asserted.

In its memoranda in opposition to CompuServe's summary judgment motions, Hill had noted CompuServe's alleged noncompliance with Local Rule 56.1(f) and stated that as a result Hill could not provide parallel numbered responses. *See, e.g.,* Hill's Mem. in Oppos. to CompuServe's Mot. for Sum. J. Based on Absence of Storing at 3, n.3. CompuServe reacted by including in its reply memoranda appendices purporting to comply with Local Rule 56.1(f). The filings, however, were not

separated clearly into a statement of material facts section and one with CompuServe's reply to Hill's additional material facts. *See, e.g.*, Reply Brf. of Defs. in Supp. of Mot. for Sum. J. of Non-Infringement Based on the Absence of Storing on the Remote Computer, App. A. Hill's responses to CompuServe's appendices were then included in the parties' joint summary judgment filings of December 10, 1999. CompuServe claims it filed the replies at issue in response to Hill's response to CompuServe's statement of material facts in its reply briefs.

Upon review of CompuServe's December 22nd filings, the Court agrees with Hill that they do not comport with the spirit behind Local Rule 56.1(f), which is to facilitate the Court's efficient identification of the facts that are in dispute. That rule provides that

Each material fact set forth in a Statement of Material Facts . . . Statement of Additional Evidence on Reply, or Surreply to Additional Material Facts must consist of concise, numbered sentences with the contents of each sentence limited as far as practicable to a single factual proposition. Each stated material fact shall be substantiated by specific citation to record evidence.

S.D. Ind. L.R. 56.1(f)(2). If a party responding to a statement of material facts or additional material facts has an objection to the fact or cited evidence, the party shall . . . set forth the grounds for the objection in a concise, single sentence, with citation to appropriate authorities. *Id.* 56.1(f)(3).

The first eight pages of CompuServe's eleven page Rule 56.1 reply included with its Storing summary judgment motion, contain only general responses to Hill's numbered paragraphs, followed by lengthy legal argument. Only the last three pages, containing a section entitled Specific Responses, appear consistent with the format required by Rule 56.1. Moreover, CompuServe even admits that its replies to Hill's responses to its statements of material facts contain legal argument, explaining that such conduct is appropriate when Aa few comments will assist the Court in assessing whether . . . there is any

genuine material factual dispute.@ Defs.= Resp. to Mot. to Strike Defs.= Three December 22, 1999 Replies, & 7 (emphasis in original). CompuServe's memorandum in response to this motion to strike also contained approximately two and one-half pages of legal argument. This type of repetition adds to the volume of materials the Court must review before rendering a decision, and slows down the process rather than makes it more efficient.⁷

In a strategy suggested by CompuServe itself, the Court will strike those sections of CompuServe's submissions containing general responses and legal arguments. *See* Def.'s Resp. to Mot. to Strike Def.'s Three Dec. 22, 1999 Replies, & 7. By including additional argumentation in its filing, CompuServe appears to have attempted to circumvent the page limitations of Local Rule 7.1. In fact, Hill has accused CompuServe of *Aflaunting*@ the local rules and has asked for sanctions. It is not evident to the Court, however, that CompuServe's conduct should be so characterized. Hill's request for sanctions is **DENIED**.

It is understandable that there may have been some confusion among the parties about which version of the local rules governed their summary judgment filings. Yet, the remedy for that situation would be to seek clarification, preferably in writing, from the Court. By guessing about the proper format, CompuServe placed itself in a position where its opponent could engage in a procedural

⁷Many of Hill's *Additional material facts*@ are duplicates of the agreed portion of the parties' Joint Statement filed before the summary judgment motions. For example, Additional Material Fact number sixteen states *A[t]he most common browsers are Microsoft's Internet Explorer and Netscape's navigator.*@ Hill's Resp. to Def.'s Statement of Mat. Facts at 3. This statement is a direct quote from the parties' Joint Statement paragraph six. As a result, Hill also did not comply with the spirit of the Local Rules, and filed duplicative materials that tend to slow rather than facilitate the dispute resolution process.

exercise that lead to a prolonged, collateral dispute about the form of the filings. In the future, parties who need guidance about which version of the local rules should apply to their case should seek specific clarification from the Court in writing, and the Court will endeavor to provide that guidance in a written form as well.

In light of these circumstances, Hill's motion to strike CompuServe's three replies to Hill's response to CompuServe's statements of material facts is **DENIED, in part**, and **GRANTED, in part**, as described above. Having resolved the extent of the evidence, briefing, and other filings it will use, the Court now turns to a full consideration of the merits of the four pending summary judgment motions.

B. Absence of Storing

1. *Markman* Ruling

Guided by the Supreme Court in *Markman*, 517 U.S. at 388-90 (*Markman II*), and the Federal Circuit in *Markman*, 52 F.3d 967 (*Markman I*), the Court held a hearing on January 6 and 7, 1999, to receive and consider the parties' evidence and arguments with respect to the disputed claim language. The parties submitted post-hearing briefs to further guide the Court's analysis of the meaning of the claim terms and language in dispute. In an order and memorandum opinion issued on April 9, 1999, the Court construed each of those claim terms, one of which was the term "storing." In doing so, the Court considered the context for the claims, the patent specification, the prosecution history, expert commentary from those skilled in the art, and other relevant extrinsic evidence. See *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1552 (Fed. Cir. 1997). Ultimately, the

interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. *Renishaw PLC v. Marposs Societa=Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (citing *Markman II*, 517 U.S. 370 (1996)).

The context for the disputed claim terms is provided in part by the patentee's description of the purpose for the invention in the specification, and an understanding of the problem identified in the prior art that the inventor was trying to solve. *Eastman Kodak Co.*, 114 F.3d at 1554. Crucial information about this problem is contained in the specification, in addition to descriptions of how the claimed invention solves the problem. *See Id.* These teachings provide valuable context for the meaning of the claim language. *Id.* Using this context, the Court framed the issue surrounding the meaning of the claim term "storing" as whether storing must be defined to include a temporal element. *Markman* Order dated Apr. 9, 1999 ("Markman Order") at 17. Finding that it did, the Court held that, in light of the purpose and description of the invention disclosed in the specification, "constant data must be recorded with the expectation that it would remain until the user removes it of his or her own volition." *Markman* Order at 23-24. Thus, the Court construed the claim term "storing" as "recording in a storage device so that it will not be involuntarily removed or deleted." *Id.* at 24.

2. Literal Infringement

Given the *Markman* construction of the claim term "storing," CompuServe argues that no storing occurs in connection with its accused on-line shopping service because, to the extent data from a Web server is recorded in the disk cache memory, it is subject to involuntary deletion by the Web

browser. Hill counters that there is substantial evidence that Web browsers store data on the remote computer with the expectation that it will remain until the user removes it, and that there is a genuine issue of material fact regarding whether CompuServe's system meets this claim element. The evidence Hill cites includes CompuServe's request for Hill to admit that a web browser may cause files from a web site to be stored on a hard disk of a remote computer. Ex. 46, Resp. of Hill to First Req. for Admissions (Nos. 1-16), No. 7. Next, Hill cites CompuServe's own admissions to requests by Hill that used the word "store" in relation to Web browsers recording data on remote computers.⁸ Ex. 38, CompuServe's Resp. to Hill's Revised First Set of Req. for Admissions (No. 1-62), Nos. 2, 3, 7, 8, 10, 11, 22, 30, 34; Ex. 39, CompuServe's Resp. to Hill's Second Set of Req. for Admissions, Nos. 87, 88, 93, 94, 98. Each of these admissions, however, were made subject to CompuServe's general, and in some cases specific, objection that the request contained a disputed claim term that had not yet been defined or construed by the Court. Ex. 38, Gen. Obj. (F); Ex. 39, Gen. Obj.

Hill also cites statements by CompuServe's witnesses, which Hill argues constitute admissions that Web browsers store data on remote computers. For example, Stephen E. Wilhite ("Wilhite"), CompuServe's chief software architect at the time, stated at his deposition in August 1998 that

⁸Hill's citations are to the Joint Statement, §§ 109-26 and evidence cited therein, rather than to the specific admissions that support this point. This practice was not helpful in that among the cited paragraphs were those referring to the issue of storing and those referring to other claim elements. The better practice would be to cite the specific admission that supports the point. By citing to the Joint Statement, Hill forces the Court to consult two or more documents before it can review the evidence that is offered in support of its assertions. In some cases, the brief cited a paragraph in the Joint statement, which cited a party's deposition with no exhibit number, which required the Court to consult the list of exhibits to determine the exhibit number for that deposition, before the deposition itself could be reviewed. A needless expenditure of time and effort could have been avoided by a more direct method of citing evidence.

Microsoft's Internet Explorer stores, or caches, HTML files in the cache on the hard disk of a remote computer. Ex. 15, Wilhite Dep. at 6, 74, 117-19. Consequently, when the Web site is visited again, if the browser can find the image files located in the cache and it has the right information, it would try to get it off the local cache. . . . *Id.* at 119. Hill also cited the deposition testimony of Paul Lamber, Chief Technical Officer for CompuServe, who stated that a Web browser will store certain information locally and if through the protocol definitions it is determined that the version on the remote computer is current, it will display the version that is on the remote computer rather than bring a new version from the host computer. Ex. 52, Lamber Dep. at 44. The browser compares what is stored on the remote computer with what is stored on the main computer to see if new information has been added, and if there is it will transmit the new information from the host computer to the remote. *Id.* at 45.

Further evidence offered by Hill to support its contention that Web browsers meet the claim element of storing includes excerpts from an opinion letter by CompuServe's former counsel, Jeff Standley. In that letter, Standley wrote:

A standard feature of web browsers is caching of the graphics or image files that may be referenced in a HTML document. Caching of graphics files improves performance by reducing the amount of information transmitted between users' computers and the various web servers with which a user may interact. When the user selects a HTML document to display, the web browser queries the cache of graphics files to determine if a particular graphics file referenced in the HTML document is present in the cache. If the user has accessed the HTML document previously, the graphics file identified in the HTML document may be present in the cache. If the referenced file is present in the

cache, the web browser uses the local graphics file to display the image.

Ex. 54, Standley Letter dated Apr. 13, 1998, at 3. Finally, Hill points to the parties' Joint Statement in which they agreed that on August 19, 1999, AOL included a hyperlink in its "Welcome" screen that allowed users to improve their computers' performance by deleting files from their disk cache memory. Joint Statement ¶ 11. When a user clicks on the hyperlink, he or she is taken to a Web site that explains "[w]hen you visit a Web page the images and text are stored on your hard drive. This allows the pages to load more quickly the next time you visit." *Id.* According to Hill, this last fact expressly admits that Web browsers store data on remote computers and that the purpose of the storing is to reduce the time it takes to create a screen full of data about a selected product, as claimed in the Hill Patent. Hill's Mem. in Oppos. to CompuServe's Mot. for Sum. J. of Non-Infringement - Storing at 21.

The point Hill is attempting to make with these citations is that CompuServe, two of its employees, and its attorney *admitted* that the CompuServe shopping service, which depends on the use of a Web browser, meets the claim element of "storing." Yet, the evidence Hill has offered does not serve that purpose. First, none of the discovery "admissions" contemplated the same meaning for the claim term "storing" as the Court gave it after the *Markman* hearing. While it is true that a *Markman* hearing does not redefine the English language, *Snuba Inter., Inc. v. Dolphin World, Inc.*, 2000 WL 961363, * 4 (Fed. Cir. Jul. 11, 2000), the claim term being construed here was found to have a narrower meaning than the ordinary meaning of the verb "storing." In particular, the Court found that the term, as used in the patent and in keeping with the key teachings of the patent, necessarily incorporates the idea that the stored data will remain until the user removes it. The *Markman* ruling

emphasized this point in the following passage:

In the specification's summary of the invention, the term "storing" or "stored" is used to reflect the notion of data being "contained" on the remote and main computer. [Hill Patent], Col. 1, ll. 51-53 ("Catalog data is stored on both the vendor's computer and the customer's computer . . . vendor's computer contains variable data", ll. 56-58 ("customer's computer contains all constant data"). It is also used to suggest some degree of permanence, as when the summary describes the customer browsing "through general catalog data *residing* on the customer's computer." *Id.*, Col. 2, ll. 5-7 (emphasis added).

Markman Order at 18-19. In essence, the Court found that "storing" suggests a temporal element in that, as long as a remote user wants to take advantage of the invention (*i.e.*, the distributed data electronic catalog system), constant data must be available on the remote computer." *Id.* at 19.

For the alleged admissions to be taken as such, any claim terms for which the Court has construed narrower meanings, that were used in the requests, depositions, or other communications, would need to have been so defined at the time. In Hill's response to CompuServe's request for admissions, Hill objected to CompuServe's "failure to provide its definitions to key terms used in these requests. . . ." Ex. 46, Resp. of Hill to First Req. for Admissions (Nos. 1-16) at 2. Similarly, CompuServe had objected to Hill's use of disputed claim terms in its requests for admissions before the Court had construed the terms. These objections weaken the effect of statements given by the parties prior to the *Markman* Order that are claimed to be evidence of admissions about whether the CompuServe system includes the construed claim term "storing."

With respect to Wilhite's deposition testimony, the Court notes that Wilhite used the verb "cached," instead of "stored," when referring to what browsers do to an HTML file sent from the Web server to the remote computer. Ex. 15, Wilhite Dep. at 74 ("They will cache this somewhere on the

disk.®). At no point did Wilhite testify that the HTML pages would be recorded in the cache of the hard disk so that it will not be involuntarily removed or deleted. Absent language like this to provide context clues for the person being deposed, it would be difficult for the Court to find that Wilhite admitted that CompuServe's system meets the claim element of storing as it has been construed. A similar defect weakens the plaintiff's argument about Lambert's deposition testimony, which the Court finds does not constitute an admission that the CompuServe system meets the claim term of storing.

In the passage quoted from CompuServe's attorney's letter, Standley does not even use the word "storing," but uses "caching" instead. It is not clear what the verb "caching" means to Standley in comparison to what the Court has determined that "storing" means in the context of the Hill Patent. Moreover, Standley's opinion was that CompuServe would not infringe the Hill Patent, in part because

 caching of graphics files by a web browser at the remote computer may not be construed to be storing of constant data at the remote computer. Stored data in the Hill patent refers to data that supports off-line browsing. Constant data for the entire electronic catalog is transmitted so that a user can review information for all available products in the catalog. . . . If the web browser attempts to cache a graphics file and determines the cache is full, it will replace graphics files that have not been referenced recently with the more recently referenced graphics files. Consequently, graphics files do not necessarily remain at the remote computer between on-line sessions . . . and therefore, are not stored at the remote computer.

Ex. 54, Standley's Letter at 9. Given the substance of Standley's opinion regarding whether CompuServe's system infringed, it would be peculiar and incongruous for the Court to find that the

same letter included an admission that the storing claim term were met.

Finally, the AOL "Welcome" page and hyperlink do not constitute an admission that CompuServe's system meets the storing claim term because the word "store" is not being used in the context of discussing the CompuServe system in relation to the Hill Patent. Instead, it is used in an informational context to assist AOL customers with improving the efficiency of their computers. As such, it is presumably written with the broader, common meaning of "storing" in mind, and not the narrower meaning given to the term in the context of the Hill Patent. Thus, instead of proving that CompuServe has "repeatedly admitted" that Web browsers store data on remote computers, and therefore literally infringe that claim element, this evidence does not even raise a genuine issue of material fact about it.⁹

Hill also relies on its own expert's opinion on patent infringement, in which Dr. Dunsmore described the Internet Explorer's handling of constant data as being "stored on the disk of the remote computer until it is *voluntarily* removed or deleted by the Web browser." Ex. 3, Dunsmore May 21, 1999, Rep. on Pat. Inf. at 6 (emphasis added). That storing, Dr. Dunsmore asserted, "is not subject to *involuntary* deletion because this data is retained by the Web browser to be kept for use the next time the Website is visited" *Id.* Aside from being circular, Dr. Dunsmore's opinion that data "deleted

⁹In his report, Dr. Dunsmore noted that Microsoft's Internet Explorer refers to data placed on the hard disk by stating "Pages you view on the Internet are stored in a special folder for quick viewing later." Ex. 3, Dunsmore May 21, 1999, Rep. on Pat. Inf. at 6. Because CompuServe includes the Internet Explorer in its own software, Hill argues that this statement by Microsoft is "virtually another admission of storing by Web browsers." Hill Mem. in Oppos. at 22. This argument fails for the same reason that the other alleged admissions were defeated--there is no evidence that would demonstrate that Microsoft's use of the word "stored" is the same as the Court has determined the Hill Patent's to be.

by the Web browser[®] is not subject to involuntary deletion ignores the perspective from which voluntariness is determined in the context of this patent. As noted, the patent teaches that the constant data is recorded on the remote computer [®]with the expectation that it would remain until the user removes it of his or her own volition.[®] *Markman* Order at 23-24. The relevant expectation is the user[’]s, not the Web browser[’]s. This is so because the purpose of the patented method is met only if, for [®]as long as a remote user wants to take advantage of the invention (*i.e.*, the distributed data electronic catalog system), [the] constant data [remains] available on the remote computer.[®] *Id.* at 19.

Moreover, a party cannot create a genuine issue of material fact by pointing to the unsupported conclusion of an expert regarding the ultimate issue of infringement. *See Arthur A. Collins*, 216 F.3d at 1046. Like the expert in *Collins*, Dr. Dunsmore offered no facts that would explain or support his opinion that deletion by the Web browser is not involuntary.

[T]he expert must set forth the factual foundation for his opinion--such as a statement regarding the structure found in the accused product--in sufficient detail for the court to determine whether that factual foundation would support a finding of infringement under the claim construction adopted by the court, with all reasonable inferences drawn in favor of the nonmovant.

Id. at 1047. Nor can a party avoid summary judgment [®]by simply framing the expert[’]s conclusion as an assertion that a particular critical claim limitation is found in the accused device.[®] *Id.*

Here, the critical claim limitation is the element of storing as the Court has defined it, which means recording so that the data will not be involuntarily deleted. There is no dispute that when the cache memory on the remote computer[’]s hard disk gets full the Web browser automatically deletes

some of the data stored therein, using a formula or algorithm developed by the software programmer.¹⁰ There is also no dispute that this action can be, and often is, performed without knowledge or awareness of the user of the remote computer. If the user is unaware that data is being deleted from his or her hard disk, then such removal cannot be deemed voluntary from the user's perspective. Dr. Dunsmore has merely asserted that this process is voluntary without providing sufficient detail about the process to enable the court to determine if a reasonable fact finder could see it the same way. A Web browser is a software program, an inanimate object, and cannot be described as doing anything voluntarily, using any common meaning for the word voluntary. At most, the act might be described as voluntary or intended on the part of the software designer, but such volition is so indirect and attenuated that it does not come close to meeting the court's definition of storing.

Hill also argues that because the recording of data in the cache memory of the hard disk by the Web browsers satisfies the objective of the Hill patent to minimize on-line time, it must be sufficiently permanent to satisfy the Court's definition of storing. Hill's Mem. in Oppos. at 22. Not so. The Court did not define the term as recording data so that it can be used again the next time the user needs it, but recording so that it will not be involuntarily deleted. The focus is not on the fact that the data will be present for some period of time that might coincide with the user's need for it, but on its presence until the user decides he or she no longer needs it and decides to remove it. In other words, the Hill Patent

¹⁰According to Hill's expert, the Internet Explorer versions 3.0 and 4.0 use the Least Recently Used (LRU) algorithm and therefore do not provide random deletion. Ex. 44, Dunsmore Aff. & 10. His research did not reveal that the use of the LRU algorithm has changed in the latest version, Internet Explorer 5.0, released in March of 1999. *Id.* & 13. No evidence was offered, however, to show the relevance of the lack of random deletion.

teaches that control of the presence of the constant data on the remote computer remains in the hands of the remote computer user. This is true regardless of the relative size of the disk cache as the size of computer hard disks increases, because the risk of data being deleted by the Web browser without the user being aware of it or being able to control it will still exist. For all of these reasons, a method in which the constant data is placed on the remote computer by a Web browser and then deleted when the Web browser determines that the cache is full, does not literally infringe the claim term *storing*.

3. Doctrine of Equivalents

In the context of a method patent, the doctrine of equivalents does not focus on equivalent structure or apparatus for accomplishing the result, but on equivalent steps in the method or process. *EMI Group*, 157 F.3d at 896. All of the claimed steps of the process or method must be performed either as claimed or by an equivalent step. *Id.* To determine equivalence, courts look at whether the process contains elements identical or equivalent to each claimed element of the patented invention. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997). Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. *Id.* at 29.

Courts apply the doctrine using an array of legal limitations, formulations, and tests. . . . *K-2 Corp. v Salomon S.A.*, 191 F.3d 1356, 1366 (Fed. Cir. 1999). Behind this array are two animating concepts. *Id.* First, the doctrine of equivalents is *limited*. It cannot allow a patent claim to encompass subject matter that could not have been patented; nor can it be used to ignore the actual

language of the patent.¹⁰ *Id.* at 1366-67. Second, the doctrine cannot be used to allow a patentee to recover subject matter that was surrendered during prosecution of the patent. *Id.* at 1367. In sum, the doctrine of equivalents must remain within the boundaries established by the prior art, the scope of the patent claims themselves, and any surrendered subject matter.¹¹ *Id.* at 1368. Moreover, application of the doctrine requires a focus on individual elements and a special vigilance against allowing the concept of equivalence to eliminate completely any such elements. . . .¹² *Warner-Jenkinson*, 520 U.S. at 40.

The most common test¹³ used for determining equivalence is referred to as the triple identity¹⁴ test, which focuses on the function served by a particular claim element, the way that element performs that function, and the result obtained thereby. *Id.* at 39. In the context of a method or process patent, the inquiry is whether the accused process performs substantially the same steps as the patented process, in substantially the same way, to obtain the same result.¹⁵ *Fromson v. Anitec Printing Plates, Inc.*, 132 F.3d 1437, 1446 (Fed. Cir. 1997), *cert. denied*, 525 U.S. 817 (1998). This variation of the equivalence test suggests the applicability of another test that has been used, determining whether there is proof of insubstantial differences between the claimed and the accused products or processes.¹⁶ *Insituform Tech., Inc. v. CAT Contracting*, 99 F.3d 1098, 1107 (Fed. Cir. 1996), *cert. denied*, 520 U.S. 1198 (1997). Regardless of the test used, the inquiry is a question of fact. Thus, it requires the Court to consider the facts offered by the parties in support of or opposition to application of the doctrine of equivalents.

Hill uses the triple identity test in its analysis. First, Hill describes the function¹⁷ as recording information in a remote memory so that, if current, it will be available for use on subsequent visits. However, the Court has construed the remote storing element to mean placing or recording in a storage

device so that it will not be involuntarily removed or deleted. Consequently, the function of the remote storing element is to record information in a remote memory until the user decides to remove it. This function serves the purpose of efficiency by allowing for the partitioning of data between the main and remote computers, and the purpose of reducing online time by allowing the user to browse the catalog information on the remote computer. *See* Ex. 1, Hill Patent, Col. 2, *ll.* 41-59. Hill has pointed to no evidence that would convince a rational finder of fact that a Web browser meets this function. From Hill's conclusory assertion, it appears the plaintiff is suggesting that recording in a remote memory so that it is available for use on subsequent visits is the equivalent of recording so that it will not be involuntarily deleted. The Court cannot perceive the equivalency. In fact, the difference between the two functions appears substantial.

Second, Hill argues that the way the Web browser records data in the remote memory is the same as in the Hill Patent, that is, it is recorded in non-volatile memory. Equivalence must be determined in the context of the entire patent, *Warner-Jenkinson*, 520 U.S. at 40, and the Hill Patent contemplates the data residing in the remote memory until the user decides to remove or delete it. As Hill readily acknowledges, the data recorded by the Web browser will remain in the memory unless the LRU algorithm . . . subsequently removes the least recently used data.@ Hill Mem. in Oppos. at 34. According to Hill the LRU algorithm is a feature added to the Hill Patent to allow the efficient management of the data in the cache. *Id.* Given the sizable capacity of the disk cache, Hill asserts, Afor all practical purposes . . . one can expect the data to remain there until he or she removes the data.@ *Id.* Yet, Hill does not explain or reconcile these facts with the requirement that constant data should be recorded so that it will not be involuntarily removed. A key feature of this element, as construed from

the entire context of the patent, is that the user remains in control of the constant data. It is not clear exactly how the accused method, which creates the risk that data will be deleted without the user's knowledge, is equivalent to a method by which the data is placed in a storage device until the user decides to remove it.

Hill's expert attempts to explain how recording subject to deletion by the LRU algorithm is equivalent to recording so that it will not be involuntarily deleted. He emphasized the Court's rationale for its definition of storing: It is much more sensible, in light of the purpose and description in the specification, that the constant data be recorded with the expectation that it would remain until the user removes it of his or her own volition. Ex. 5, Reply Report of Dr. Dunsmore (Reply Rep.) & 18. Dr. Dunsmore agreed with CompuServe's expert's definition for volition as 1. An act of willing, choosing, or deciding. 2. A conscious choice; decision. 3. The power or capability of choosing; will. Id. (citing Ex. 4, Infringement Report--Storing by Andy Johnson-Laird, & 15). The way Dr. Dunsmore rationalizes his claim that automatic deletion by a Web browser is equivalent to the Hill Patent's remote storing element is by focusing on the word volition. In a system that uses the LRU storage management algorithm, Dr. Dunsmore opined, the human user by his or her own volition (act of will, choosing, conscious choice, decision) performs an action that causes the removal of some stored data. Ex. 5, Reply Rep. & 18. What Dr. Dunsmore does not explain, however, is how the user is making a conscious choice to delete the least recently used data from the disk cache, when it is undisputed that users may be unaware that stored data is being removed. See id. & 5 (The human user may or may not be aware of what algorithm is being used or even that some stored data is being removed.).

The Aconscious@ element of choosing requires that a user know exactly what he or she is doing and can predict the consequence of such choice. That cannot be met without a reliable means of informing the user that an action he or she is about to take may delete some stored data. Arguably, the user should also be able to choose what data will be removed. Dr. Dunsmore has described two common types of storage systems available for storing data, one of which gives the user a choice. That system is one in which,

when the user performs an action that would cause the removal of stored data, the software poses the question, <Are you sure that you want to remove this stored data?=- or some variation thereof. The human user is given the option to say Yes (in which case the information is removed) or No (in which case the information is not removed). Such a system certainly meets Judge McKinney=s requirements that information Aremain until the user removes it of his or her own volition.@

Ex. 5, Reply Rep. & 4. The other system Dr. Dunsmore described is one in which there are no questions posed to the user prior to the software deleting stored data. *Id.* & 5. That system is the one used by the accused Web browser. In it, the user may choose to perform some action that causes the deletion of some stored data. But that action is taken without the user knowing the exact consequence of his or her decision. Dr. Dunsmore does not explain how users will know that, for example, visiting another Web site will cause the deletion of some stored data. Nor does he address the fact that a user may not want to delete the least recently used stored data, but may instead have some other criteria he or she would like to use when deciding which data to delete. The Hill Patent contemplates this degree of autonomy and control by the user over the constant data residing on a remote computer in the

claimed electronic catalog method and apparatus patent. The Court does not see how Dr. Dunsmore's opinion can suffice to create a genuine issue of material fact about whether the Web browser's LRU algorithm deletion mechanism is equivalent to the way the claimed remote storing element performs.

In a further effort to demonstrate infringement, Hill described the LRU algorithm deletion mechanism as an added feature that enhances a system in which the remote computers have a fixed amount of memory. Hill Mem. in Oppos. at 26; Joint Statement & 135. In the abstract, Hill's contention seems logical. Citing cases for the proposition that claims using the term "comprising" are open claims that read on devices which add additional elements, *Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1178 (Fed Cir. 1991), Hill contends that CompuServe cannot avoid infringement merely by adding a data management system, which it views as an additional element. *See Vivid Tech., Inc. v. American Sci. & Eng., Inc.*, 200 F.3d 795, 811 (Fed. Cir. 2000); *Suntiger, Inc. v. Scientific Res. Fund. Grp.*, 189 F.3d 1327, 1336 (Fed. Cir. 1999). While this may be an accurate representation of the law, its application to the facts in this case does not yield the result Hill intends. Instead, the Court is further guided by the analysis in a recent decision in which the Federal Circuit explored whether the additional element in an accused process was excluded by the claim term in the patent. *See Northern Telecom Ltd. v. Samsung Elec. Co., Ltd.*, 215 F.3d 1281, 1292 (Fed. Cir. 2000).

In *Northern Telecom*, the patent described "an initial step of plasma etching" which is a chemical process whereby electrical power is applied to a gas which creates a plasma of chemically-active radicals that etch the work piece. *Id.* Samsung argued that this language specifically excluded all other forms of etching, including the process used in its accused system—reactive ion etching (a combination of plasma and ion bombardment). *Id.* After considering the claim language, the

specification and the prosecution history, the court did not agree with Samsung that the step of plasma etching necessarily excluded reactive ion etching. *Id.* at 1296. Although it was clear that the patentee preferred plasma etching, and that plasma etching and reactive ion etching were different, that was not enough to narrow the meaning of plasma etching to require the exclusion of any ion bombardment. *Id.*

As the court explained, if a patent requires A, and the accused device or process uses A and B, infringement will be avoided only if the patent's definition of A excludes the possibility of B. *Id.* This is so because the addition of features does not avoid infringement as long as all of the elements are present. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 945 (Fed. Cir.), *cert. denied*, 498 U.S. 920 (1990).

Informed by this reasoning, the Court notes that the alleged added element in the CompuServe system, the LRU algorithm deletion of data when the cache gets full, is not merely an additional element.

Instead, it is mutually exclusive of the remote storing element as the Court has construed it in the context of the Hill Patent. In other words, remote storing is recording so that the data will not be involuntarily deleted (A) and the LRU algorithm in the Internet Explorer Web browser causes involuntary deletion (B). Logically, A could also be defined as not B, which means that A and B are mutually exclusive. The existence of B, the involuntary deletion by the Web browser, negates the existence of A, recording so that it will not be involuntarily deleted. The Court's construction of the claim element of remote storing has created a special circumstance that evades the general rule that infringement is not avoided by the presence of elements or steps in addition to those specifically recited in the claim. *Vivid Tech.*, 200 F.3d at 811 (the signal comprising implements the general rule absent some special circumstance or estoppel).

Finally, Hill contends that the result of the Astoring@element in the accused service is the same as that in the Hill Patent: the data is available for later use and it minimizes on-line time. This assertion, however, ignores the undisputed fact that when the Web browser determines that the disk cache is full, it will delete data from the cache, and that data will no longer be available for later use. According to Hill, this is not a real threat, given the size of disk cache. Yet, it is a threat nonetheless, and it demonstrates that the accused service's remote storing method does not produce the *same* result. Moreover, even if it did produce the same result, that fact would not suffice to show infringement of this element under the doctrine of equivalents if the method used to achieve that result is not substantially the same as in the claim element. *Mooney*, 663 F.2d at 736.

Regardless of the test applied, the Court finds that the accused service does not perform substantially the same function, in substantially the same way, to obtain the same result, and therefore does not infringe the Hill Patent under the doctrine of equivalents.

C. Absence of Classification of Data

1. *Markman* Ruling

In its *Markman* ruling, the Court defined variable data in accord with its common meaning, with the exception of acknowledging that the Hill Patent contemplated some classification of a set of data into variable and constant. The Court wrote:

Hill's patent is not about the proper classification of data for an electronic catalog system. It is about distributing that data between two different computers, a main and a remote, establishing a system for updating the data left on the remote computer, and

transmitting the updated variable data to the remote to create the most current product information available. It presumes some sort of classification of the data, but does not limit how that is accomplished. Thus, the Court finds that the definition for *Variable data* that is most true to the claim language and in alignment with the patent's description of the invention is *Product information classified as capable of changing at any time.* The definition that best conveys the meaning of *Constant data* is *Product information classified as likely to change less often than variable data.*

Markman Order at 46 (citation omitted). The classification of data into those two categories facilitates a key aspect of the Hill invention: *Distributing the data needed to obtain complete information about a product on two different computers, the main computer, which contains all of the product information data for the electronic catalog, and the remote computer which holds a subset of that data. This is the essence of the distributed data design technique employed by the inventor to accomplish his design objectives.* *Id.* at 38.

Implicit in the Court's construction of these claim terms is the notion that the product data is classified according to its relative likelihood of changing. For that reason, CompuServe argues that its accused service does not infringe this claim because it neither uses or contains product data that is classified on this basis. CompuServe offers a second ground for at least partial summary judgment relating to independent claims 15 and 35, which comprise the step of *Comparing constant data.* Mem. in Sup. of CompuServe's Second Mot. for Sum. J. at 2. In response, Hill argues that CompuServe's argument relies on two faulty premises. First, that information has to be classified by the Web page designer based on how likely it is to change. Second, that all text must be variable data and all graphics

constant. The Court will address the specifics of these arguments in the following sections.

2. Literal Infringement

To literally infringe independent claims 1, 15, 30, and 35, the CompuServe on-line shopping service must include the elements of constant data and variable data. The Court has construed variable data as *product information classified as capable of changing at any time.* *Markman* Order at 46. Constant data means *product information classified as likely to change less often than variable data.* *Id.* Although the Court found that it was not necessary to limit the claims with respect to who would classify the data, or exactly how and when it would be classified, it was convinced that in order for the patented method to work as intended by the inventor, all product information had to be classified in one category or the other. Hill argues that the Court's interpretation of this term does not require the Web page designer to have classified the data according to how likely it is to change, and Hill is partly correct. There is no limitation as to who will do the classifying of the data. However, that the data must be classified according to its relative likelihood of changing is evident from the context of the entire patent.

The patented method's objectives are met by the distribution of data between a main computer, which stores all constant and variable data, and the remote computer on which the constant data is stored. As the Court has already found, a key teaching of the Hill Patent is that by partitioning information into *constant* data (which may include graphics) and *variable* data, the system can work more efficiently and quickly to provide accurate product information. This efficiency is achieved in part because the constant data resides on the remote computer and, if such data on the remote computer is

not at a different revision level than the constant data on the main computer, it does not need to be transmitted each time a user wants product information. For such a system to work, at some point prior to operation of the patented method, the data must have been separated into classes, and the Court has found that those classes are determined based on the relative likelihood that the data will be changing. The reason for this classification criteria is efficiency.

This concept is reinforced by the fact that the electronic catalog system contemplates storing only the constant data on the remote computer and transmitting the variable data each time product data is required. Ex. 1, Hill Patent, Col. 1, *ll.* 52-67, Col. 2, *ll.* 1-2. The summary of the invention in the specification indicates that variable data is Adata that can change at any time.@ *Id.*, Col. 1, *ll.* 53-54. The fact that variable data is transmitted every time the customer wants product information, and that it is expressly defined as being capable of changing at any time, leads to the conclusion that variable data is so classified because of its likelihood of changing. Such a classification is consistent with the goal of efficiency. The system handles that type of information differently from information classified as not likely to change as often, which the system contemplates only transmitting if it has actually changed. Thus, by teaching the partitioning of data on the basis of how often it is expected to change, the patented invention creates an internally efficient system for transmitting the most up to date data in the least amount of time. Hill's contention that the data need not be classified before operation of the system is incorrect.

Hill is also partly correct with respect to the second premise to CompuServe's argument that Hill labeled as Afaulty.@ There is no requirement based on the claims or the specification that all constant data should be graphics or image files, and all variable data a text file. In fact, the summary of the

invention specifically described constant data as including both graphics data and textual data. *Id.*, Col. 1, ll. 58-59. CompuServe has cited evidence, however, by which Hill implied that its theory of infringement related to text files being classified as variable data and graphics files as constant. For example, in its August 1998 answers to CompuServe's interrogatories, Hill added an explanatory clause stating, *e.g.*, product information that appears as text within the HTML file or textual product information in an HTML file, each time it mentioned variable data. *See* Ex. 2, Hill's 8/10/98 Answers to Interrogatories, pp. 19, 22, 24, 25, 27, 29, 30, 32, 34, 36, 37, 38, 40. Correspondingly, whenever Hill referred to constant data it added an explanatory clause, such as *e.g.*, graphic product information in one or more separate files incorporated by reference from an HTML file, such as inline image files. *See* Ex. 2, pp. 19, 20, 21 (constant data file incorporated by reference in a Web page), 22 (same), 24, 25, 26 (such as an inline image file), 27 (*e.g.*, graphic files incorporated by reference from an HTML file), 29, 30, 32, 34, 37, 38, 41.

This theme was repeated in Hill's expert witness's infringement report, in which Dr. Dunsmore opined that the claim terms constant data and variable data were met in the accused system. All text that is not part of an image file is information related to at least one product This textual information is capable of changing at any time. . . . Notice the Last Modified: Unknown= denotation with this variable data--which will inform the Web browser to reload it each time this page is visited. Ex. 3, Dunsmore 5/21/99 Infringement Rep. at 3 (emphasis added). Dr. Dunsmore specifically concluded that [b]y giving the textual information a Last Modified: Unknown= denotation, the text is treated as variable data. *Id.* With respect to constant data, Dr. Dunsmore stated, [a]ll images are information related to at least one product. . . . These images are likely to change less often than the

textual information.® *Id.* He concluded with, A[b]y giving the image data their actual <Last Modified= dates (rather than <Unknown=), the images are treated as *constant* data. These can still be changed, but are less likely to need to be updated each time when visited by the Web browser.® *Id.* at 3-4 (emphasis added).

As a result of these assertions, CompuServe argued that Hill cannot prove infringement unless it can prove that all of CompuServe's textual information is treated as variable data and all of its graphic information as constant. As the Court has noted, the claims do not require that constant data be only one type of information, just that it be classified as less likely to change than variable data. Correspondingly, variable data does not have to be just one type of information as long as it is data classified as likely to change at any time. In light of this teaching, what must be shown is that the accused system classifies data files on the basis of their relative likelihood of changing and then treats those files consistently with the way the Hill Patent treats constant and variable data.

Hill argues that it does. Citing Dr. Dunsmore's May 1999 Infringement Report, Hill asserts that evidence of classification is found in the ALast Modified@ dates or headers associated with data files or Active Server Page (AASP@) files in the CompuServe online services system. For example, when a data file has a ALast Modified: Unknown@ date, it will be sent every time the browser accesses a Web page from the server containing that file. *See* Joint Statement ¶ 15. Similarly, ASP files are sent every time the browser asks for information with which they are associated, unless the ASP file contains a ALast Modified@ header (and the page has not been modified), the Expires header (and the number of minutes specified have not passed), or the Expires-Absolute header (and the date and time specified are still in the future). *See* Joint Statement ¶ 16. Although these facts are not disputed, Hill and CompuServe

reach different conclusions from them. CompuServe has identified instances in which data files with a **ALast Modified@** date of unknown or none actually contained boilerplate text that was not likely to change at all, as well as graphics files containing information that is likely to change at any time, such as price. *See* Ex. 7, Gregor Aff. **&&** 8-9; Ex. 42, House Aff. **&&** 5, 7; Ex. 6, Dunsmore Dep. at 162-63.

Hill, on the other hand, sees the modification designations as proof of classification of data on the CompuServe system.

Hill's emphasis, however, on the data that make up specific Web pages that its expert has reviewed only serves to prove that there is data on any given Web page that changes at a relatively faster pace than other data on the page. It does not prove that all of the product information data has been classified for use in the system in accordance with how often it is likely to change. This fact is significant given that there is no dispute that all of the data from a Web page is **Acached@** on the remote computer, not just the alleged constant data. Thus, the Court cannot use the fact that data is being **Acached@** on a remote computer as evidence that it has been classified as constant and is being treated as constant data in the Hill Patent. Other evidence must be offered to allow the Court to discern classification in the accused system on the basis of the data's likelihood of changing. In its surreply, Hill argues that evidence of such classification between constant and variable data on CompuServe's Web sites is found in the fact that some files have a **ALast Modified: Unknown@** date (variable data) and others have a specific date associated with the **ALast Modified@** header (constant data), which represents the data's revision status. Hill's Surreply at 2. According to Hill, this classification is done for the same reason as in the Hill Patent--to reduce transmission time. *Id.*

Yet, this evidence fails to provide the necessary connection between the meaning of constant data and variable data as the Court has construed them, and the alleged classification on the accused system. In other words, Hill has no evidence that a file is designated "Last Modified: Unknown or None" because it contains data that is likely to change at any time. Hill relies on its expert's report in which Dr. Dunsmore stated that "[b]y giving the textual information a 'Last Modified: Unknown' denotation, the text is treated as variable data." Ex. 3, Dunsmore 5/21/99 Infringement Rep. at 3. What Dr. Dunsmore did not say, however, is that the text was given that unknown modification date because it is classified as likely to change at any time. Nor did he offer any facts that would demonstrate that all of the data with modification dates of "Unknown" or "None" comprises data that is classified as likely to change at any time. Instead, the only clear connection that can be made between the modification designation in the CompuServe system and the Hill method is that data that does not have a specific modification date will be sent every time the Web page is visited. No evidence has been provided to show that such treatment occurs because that data is likely to change at any time.¹¹ The simple fact that some data on a few Web pages with an unknown modification date could be capable of changing at any time does not speak to whether that is the reason it was given such a modification designation. As with Dr. Dunsmore's testimony on the issue of storing, his opinion here will not suffice to create a genuine issue of material fact. *See Collins, Inc.*, 216 F.3d at 1047 ("Expert must set forth

¹¹Moreover, the data that Hill alleges is constant data, data that has a specific modification date, is not treated identically to constant data in the Hill Patent. Some of that data may contain "Expires" dates, by which the Web browser is able to discern whether it should reload those files from the Web server. Unlike in the Hill Patent, when the data has an "expires" date, there is no "comparison" of revision status at the main computer. Instead, the Web browser is able to determine the revision status of such data by comparing its expiration date with the current date on the remote computer.

the factual foundation for his opinion. . . in sufficient detail for the court to determine whether that factual foundation would support a finding of infringement under the claim construction adopted by the court, with all reasonable inferences drawn in favor of the nonmovant.®).

As further support for its contention that the CompuServe system infringes the claim terms of constant and variable data, Hill points to an article by Nancy Cluts, an employee of Microsoft Corporation. In it, Ms. Cluts observed that

Most Web pages combine content that is static with content that is dynamic. The dynamic content can change every 30 seconds or every week--it depends on the Web site. . . . The static content will change so infrequently that you know it will always be on the page. . . .

As a result, it would certainly make sense that you could speed up your Web site's responsiveness by downloading only the content that changed (i.e., the dynamic content). That way, the static content would not have to be downloaded every time the page was displayed; instead it would be retrieved swiftly from the cache. . . . In fact, many sites on *www.microsoft.com* . . . have taken the time to cache their static items and have reaped the benefit of a noticeable performance increase.

Ex. 44, Dunsmore Aff. & 12, Ex. A. According to Hill, by substituting the words constant for static data, and variable for dynamic, it is easy to see that the web pages described by Ms. Cluts incorporate the technology of the Hill patent.® Hill's Resp. to CompuServe's Second Mot. for Sum. J. at 16. This article, Hill contends, raises a genuine issue of material fact about CompuServe's claim that data on the Web is not classified into constant and variable categories based on their relative likelihood of changing.

The Court cannot agree. First, there is no evidence that Ms. Cluts= article is referring to any of the methods used in connection with CompuServe=s online shopping service. Second, the article was dated March 18, 1999, and refers to a new version of the Internet Explorer that Aoffers an even greater enhancement of caching that improves the responsiveness of Web sites@ Ex. 44, Ex. A at 1. The writer cautions, however, that Athe features discussed in this article are supported in Internet Explorer 5, and were not available in previous versions@ of Internet Explorer. *Id.* Hill does not offer any evidence to connect Ms. Cluts= reference to Internet Explorer 5 with the CompuServe online services. Finally, from the informational tone of the article it seems intended to inform those who design Web sites about a new development or discovery (according to Ms. Cluts) that may assist with the performance of their Web sites. It does not provide specific evidence that anyone is actually using the described method of caching static data so that only dynamic data need be downloaded, and even if it did, there is no evidence that the person using the method is associated with CompuServe. For all of these reasons, Hill=s effort to prove that CompuServe online services classify data according to the relative likelihood the data will be changing using Ms. Cluts= article contains a few significant gaps and does not raise an issue of fact.

CompuServe is also seeking at least partial summary judgment of non-infringement on Independent Claims 15 and 35 and their dependent claims, because the accused system includes no step by which constant data in the memory of the remote computer is compared with the constant data stored in the memory of the main computer. The parties agree that the CompuServe system does not compare constant data in the memory of the remote with constant data on the main computer. Joint Statement && 29-30. Further evidence of this fact is provided by Hill=s expert, Dr. Dunsmore, who

emphasized that in the accused service Aremote data is compared only by comparing its revision status with the revision status on the main computer.@ Ex. 3, Dunsmore 5/21/99 Infringement Report at 14-15, 22-23. Hill's response to this aspect of the second motion for summary judgment makes clear that it considers the comparison of remote revision status with the revision status on the main computer to be the same as, or equivalent to, comparing constant data from the remote with constant data on the main computer. CompuServe objects to this interpretation on the basis that it violates the rule against importing limitations into the claims and the doctrine of claim differentiation.

While it is true that in construing a claim the Court is not to import extraneous limitations, the circumstances here do not result in a limitation of Claims 15 and 35, but an interpretation of their scope to include a comparison of the remote revision status with the revision status for constant data on the main computer. Hill does not argue that Independent Claims 15 and 35 should be limited to that act in meeting the element of comparing constant data; rather it contends that the scope of the broader claim elements in Claims 15 and 35 of Acomparing constant data@ could include the narrower act of comparing the revision statuses, as described in their dependent claims. Hill is correct. Both the prohibition against importing extraneous limitations into claims and the doctrine of claim differentiation are aimed at preventing the same wrong: unduly narrowing a claim that is written in broader language. Noting that narrower language is found in another claim, and presuming that it has a distinct meaning from the broader language of the claim being interpreted, is one way of preventing this.

The doctrine of claim differentiation creates a presumption that each claim in a patent has a different scope. *Comark Comm., Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998). AThere is presumed to be a difference in meaning and scope when different words or phrases are used

in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant.⁶ *Id.*; *Modine Mfg. Co. v. United States Internat. Trade Comm'n*, 75 F.3d 1545, 1551 (Fed. Cir.), *cert. denied*, 518 U.S. 1005 (1996). This is a doctrine based on the common sense notion that different words or phrases used in separate claims have different meanings and scope. *Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971 (Fed. Cir. 1999).

The Court finds that interpreting the claim element of comparing constant data to include the act of comparing the revision status of constant data in a memory of the remote computer with the revision status of constant data on the main computer, does not violate the doctrine of claim differentiation. This is because the broader term “comparing constant data” in the independent claim may be accomplished by the narrower one, comparing the revision statuses of constant data on the remote with the constant data on the main computer. Yet, the broader term may also be accomplished in other ways, such as the direct comparison of constant data on the two computers. Interpreting the broader term to include the narrower one, revision status comparison, does not render the narrower claim superfluous. That claim is limited to only one way of comparing constant data -- by comparing revision statuses. Such a claim has a different meaning and scope, a narrower one, than the broader claim term that allows for constant data to be compared directly, by comparing revision statuses, or by other ways.

For these reasons, CompuServe’s argument that it is entitled to partial summary judgment of non-infringement of Claims 15 and 35 must fail. That failure however, is not fatal, for the Court has already found that the CompuServe online shopping service does not include the claim elements of storing, constant data or variable data, as the Court has construed them. Even though the motion for

partial summary judgment of non-infringement of independent Claims 15 and 35 based on the alleged absence of comparing constant data stored on the remote with constant data on the main computer, must be **DENIED**, the Court has found these claims not to be infringed based on other grounds. The denial of this partial summary judgment motion does not mean the issue need be decided at a trial.

3. Doctrine of Equivalents

Essentially, Hill's argument that CompuServe infringes the constant and variable data claim elements depends on Hill's belief that it only has to point to data that is capable of changing at any time to satisfy the definition of variable data, and to data that is likely to change less often than variable data to satisfy the definition of constant data. As noted above, this belief is mistaken. There must be some proof of a classification of all product information data on the basis of its relative likelihood of changing to meet these claim elements. By pointing to Web pages containing data that is capable of changing at any time, such as the mall marquee or the dates of special events, Hill is not identifying variable data as the Court has defined it. Such evidence only suggests that the data on Web pages is likely to change at different rates, which says nothing about whether it has been deliberately divided into classes based on the relative rates of change expected, so that the constant data can be stored on a remote computer. Because a key aspect of the definition of constant and variable data is missing, the evidence Hill offers does not suffice to raise a genuine issue of material fact about infringement under the doctrine of equivalents.

D. Invalidity Based on Anticipation

An anticipation or obviousness defense is based on the requirement that an invention be novel or new. The novelty requirement lies at the heart of the patent system. I DONALD S. CHISUM, CHISUM ON PATENTS ' 3.01 (Rel. No. 71, Sept. 1999) (hereafter CHISUM ON PATENTS@). If the invention is novel, then A further inquiry must be made into whether it is new enough@ to be patented. *Id.* A successful defense of anticipation A requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee.@ *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302 (Fed. Cir. 1995). *See also C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1349 (Fed. Cir. 1998); *Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1461 (Fed. Cir. 1997). A challenger cannot prove anticipation A by combining more than one reference to show the elements of the claimed invention.@ CHISUM ON PATENTS ' 3.02. Thus, a prior patent or device must contain all of the elements and limitations in the disputed patent as arranged in the patented device. *See C.R. Bard*, 157 F.3d at 1349; *Hoover Group*, 66 F.3d at 303.

Although Hill has addressed the issue of obviousness with respect to the Hill Patent, CompuServe made clear in its reply brief that it was relying on only one prior art reference to challenge the validity of the Hill Patent. CompuServe Reply Brf. at 20-21. For that reason, the Court finds that anticipation is the only basis for CompuServe's invalidity challenge.¹² Moreover, CompuServe has

¹²The determination of whether an invention is obvious is a legal conclusion, dependent on underlying factual inquiries. *WMS Gaming Inc. v. International Game Technology*, 184 F.3d 1339, 1355 (Fed. Cir. 1999). Those factual inquiries include: 1) the scope and content of the prior art; 2) the level of ordinary skill in the field of the invention; 3) the differences between the claimed invention and the prior art; and 4) any objective evidence of nonobviousness, such as long-felt need, commercial success, the failure of others, or evidence of copying. *Id.*; *C.R. Bard*, 157 F.3d at 1351. In other

specifically stated that it considers the issues raised in its anticipation defense to be *conditional*, that condition being that the Court has denied either of its summary judgment motions on the issues of non-infringement. Hill, on the other hand, repeatedly takes the position that the Court should rule on all of the pending motions, to avoid multiple appeals and undue delay.

The Court has found that CompuServe's online shopping service does not infringe the Hill Patent because it does not include the claim elements of storing or constant and variable data as the Court has defined them. As a result of these findings of noninfringement, the Court is faced with the decision of whether to also undertake an analysis of the patent's validity. It is guided in making this decision by several relevant cases. The Supreme Court has addressed the issue of whether the Federal Circuit, after affirming a finding of noninfringement, may properly find the district court's ruling on the issue of validity moot. *Cardinal Chemical Co. v. Morton Internat., Inc.*, 508 U.S. 83, 95 (1993). Prior to this decision, the Federal Circuit had routinely found these appeals to be moot once it affirmed the district court's finding of noninfringement. The Supreme Court disagreed with that practice, holding that when validity arises in a counterclaim seeking a declaratory judgment of invalidity, the Federal Circuit retains jurisdiction over an appeal of the district court's ruling on the counterclaim. *Id.* It explained that "[a] party seeking a declaratory judgment of invalidity presents a claim independent of the patentee's charge of infringement," which means that even if the appellate court affirms the finding of noninfringement it still must consider the counterclaim. *Id.*

words, obviousness calls on the Court to consider the patent in light of multiple prior art references. Because CompuServe only points to one prior art reference, its invalidity defense does not involve obviousness.

This decision is a narrow one, however, relating only to the issue of whether an affirmed finding of noninfringement, without more, justifies a reviewing court's refusal to reach the issue of validity in a declaratory judgment counterclaim. *Super Sack Mfg. Corp. v. Chase Pkg. Corp.*, 57 F.3d 1054, 1060 (Fed. Cir. 1995), *cert. denied*, 516 U.S. 1093 (1996); *Brunswick Corp. v. United States*, 34 Fed.Cl. 532, 556 (Fed. Cl. 1995), *aff'd* 152 F.3d 946 (Fed. Cir. 1998). The Supreme Court made clear that the decision related only to the jurisdiction of the intermediate appellate court, and not to a trial court. *Cardinal Chemical*, 508 U.S. at 95. In doing so, it left open the possibility that a finding of noninfringement by the trial court, in the proper case, may justify the court's refusal to consider the issue of validity.

Courts considering whether to issue a ruling on validity after a finding of noninfringement have consistently distinguished the *Cardinal Chemical* case on the basis that it considered validity in the context of a counterclaim for declaratory judgment, not in the context of an affirmative defense. *See Hill-Rom Co., Inc. v. Kinetic Concepts, Inc.*, 209 F.3d 1337, 1344 (Fed. Cir. 2000); *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1481 (Fed. Cir. 1998) (Supreme Court in *Cardinal* drew a dispositive distinction between an affirmative defense and a counterclaim for a declaratory judgment); *Brunswick Corp.*, 34 Fed.Cl. at 557 (noting that Supreme Court made it clear that its ruling in *Cardinal* was limited to counterclaims challenging validity brought under Declaratory Judgment Act). Thus, it appears that when validity is challenged only by means of an affirmative defense, and the district court has found noninfringement, the court need not consider the validity of the patent.

Here, the issue of the validity of the Hill Patent has been raised as a counterclaim for declaratory relief that was asserted by CompuServe in response to Hill's complaint of infringement. For that reason, it is incorrect for CompuServe to state, "[i]f the Court grants summary judgment on either of the first two non-infringement motions, there would be no need to consider the instant validity motion." CompuServe's Mot. for Sum. J. of Invalidity at 1. Even if the Court granted CompuServe's motions for summary judgment of noninfringement, the counterclaim on the issue of validity would still remain.¹³ For that reason, the Court will proceed with a review of the patent's validity in light of the one prior art reference cited by CompuServe.

Patent claims are presumed to be valid, absent clear and convincing evidence of invalidity presented by the alleged infringer. *Monarch Knitting Mach. Corp. v. Sulzer Morat GMBH*, 139 F.3d 877, 881 (Fed. Cir. 1981). Anticipation of specific patent claims requires a showing that a single prior art reference disclosed every limitation or element in the patent claim. *General Elec. Co. v. Nintendo Co., Ltd.*, 179 F.3d 1350, 1356 (Fed. Cir. 1999). To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter. *PPG Indus., Inc. v. Guardian Indus. Corp.*, 75 F.3d 1558, 1566 (Fed. Cir. 1996). The burden of persuasion remains at all times on the challenger to the patent's validity, who must meet the clear and convincing standard of evidence to overcome the statutory presumption of validity. *See Monarch Knitting Mach.*, 139 F.3d at 881 (citing 35 U.S.C. § 282).

¹³The Court notes that CompuServe's counterclaim also seeks a declaratory judgment of noninfringement and unenforceability. The Court's ruling with respect to the other summary judgment motions adequately resolves the issues of noninfringement, but the issue of unenforceability has not been raised in any of the motions. As a result, the Court deems that issue waived.

CompuServe suggests that its burden is lessened because it has pointed to a prior art reference that was not considered by the Patent Office during its consideration of the Hill Patent. CompuServe's Mem. in Sup. of Mot. for Sum. J. on Invalidity at 11-12 (citing *American Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1360 (Fed. Cir.), *cert. denied*, 469 U.S. 821 (1984)). The case CompuServe cited does not exactly support this contention. In *American Hoist*, the court specifically stated that the fact that the prior art reference was not considered by the Patent Office may serve as evidence toward meeting the challenger's burden, but it does not shift it, lighten it, or otherwise change the burden of convincing the court by clear evidence that the patent is invalid. *Id.*; see also *Newell Window Furn., Inc. v. Springs Window Fashions Div., Inc.*, 1999 WL 1077882, *2 (N.D. Ill. Oct. 7, 1999). In light of this holding, the Court, at most, will consider this fact along with the other evidence offered regarding validity.

The determination of anticipation involves a factual inquiry about whether there is any difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps*, 927 F.2d at 1576. "[A] finding of anticipation requires that all aspects of the claimed invention were already described in a single reference. . . . *Id.* Extrinsic evidence, such as expert testimony, could help educate the decision-maker about the prior reference's meaning to a person of ordinary skill in the field of the invention. *Id.* Here, CompuServe has offered only the prior art reference itself, which is a sixty-five page patent disclosure, containing forty-three claims and written in highly technical language, an appendix to its motion containing an element by element comparison between the Hill Patent and the Prodigy Patent claimed to anticipate

it,¹⁴ and a declaration from one of the inventors of that patent. This evidence does not suffice to show in a clear and convincing manner that any of the claims of the Hill Patent were anticipated by the single prior art reference, the Prodigy Patent.

CompuServe further conditioned this motion on the Court's precise ruling on the infringement issues. CompuServe's Mem. in Sup. of Mot. for Sum. J. of Invalidity at 1. If that ruling accepted Hill's argument that the claim element of storing could be met by the browser's recording of data in the cache of the remote computer, subject to involuntary deletion, then the validity issues would be narrowed. *Id.*

Specifically, CompuServe noted that the Prodigy Patent discloses the temporary recording of data, subject to involuntary deletion. For that reason, the Court would only need to determine if the other elements of the Asserted Claims were present. If they are, then the Prodigy Patent anticipated the Hill Patent. By implication, the converse would seem to negate a finding of anticipation. In other words, CompuServe has framed the issues in such a way that if the Court rules in favor of Hill on the infringement issues, then it should find that the Prodigy Patent anticipated the Hill Patent, but if the Court rules against Hill, there may not be any anticipation by the Prodigy Patent. *Id.* at 1-2.

The parties agree to the following facts about the state of the art at the time of the Hill Patent. At the earliest possible date of invention for the Hill Patent, April 10, 1991, distributed and replicated databases and file systems were known in the art. Joint Statement ¶¶ 31, 33. Networks linking a

¹⁴Hill challenges this appendix as an unsworn and unauthenticated chart purporting to compare the elements of some of the Asserted Claims to disclosures in the Prodigy Patent. Hill's Mem. in Oppos. at 15. Hill suggested that the chart must have been prepared by CompuServe's counsel. CompuServe did not deny this, but instead suggested that the chart was somehow supported by the Gordon Affidavit, without describing how. The Court assumes CompuServe meant the Gordon Declaration.

plurality of remote personal computers with a main or host computer were also widely known. *Id.* & 34. In addition, those skilled in the art knew about version control of files in a distributed or replicated database system. *Id.* && 35, 36. They also knew about electronic catalogs, online shopping, and integrating or merging data on a remote computer. *Id.* && 37-39. The Prodigy Patent, filed July 28, 1989, and issued September 13, 1994, referred to "shopping events" and described the capabilities of a version of the Prodigy online service. *Id.* && 41-42. When the Patent Office reviewed the Hill Patent application for an electronic catalog system and method, it did not consider the Prodigy Patent. *Id.* & 42. Given these agreed facts and the Court's findings with respect to noninfringement, the burden of determining whether the Hill Patent was anticipated by the Prodigy Patent is somewhat lightened.

Nevertheless, the Court's task is complicated by the fact that both parties tended to overstate their positions in their arguments. For example, in its comparison of the Prodigy Patent with the Hill Patent, CompuServe has paraphrased the disclosures of the Prodigy Patent in language that echoes the Hill Patent claims. With regard to how the Prodigy Patent anticipated the first step of Claim 1 of the Hill Patent,¹⁵ CompuServe stated "[t]he Prodigy Patent discloses a central delivery system which stores all of the data used by the service, including product information and associated version control information." CompuServe Mem. in Sup. at 17. It hastened to add that the Prodigy "delivery system" supports an online shopping service and is "equivalent to Hill's main computer." *Id.* The portion of the Prodigy Patent CompuServe cited for this point, however, described the preferred embodiment this

¹⁵Step 1 of the Hill Patent calls for "storing and maintaining variable data and constant data related to at least one product and a main revision status in a memory of a main computer, the main revision status indicating the revision level of the constant data stored in the main computer." Ex. 1, Hill Patent, Col. 21, *ll.* 56-60.

way:

As shown in FIG. 1, interactive network 10 uses a layered structure that includes an information layer 100, a switch/file server layer 200, and cache/concentrator layer 300 as well as reception layer 401. This structure maintains active application databases and delivers requested parts of the databases on demand to the plurality of RS 400's, shown in FIG. 2.

Ex. 18, Prodigy Patent, Col. 4, *ll.* 20-25. CompuServe's paraphrasing is allegedly further supported by another description of the preferred embodiment. A[S]erver unit 205 is seen to be connected to information layer 100 and its various elements, which act as means for producing, supplying and maintaining the network databases and other information necessary to support network 10. @ *Id.* Col. 4, *ll.* 31-35. No further evidence or argument is contained in CompuServe's brief to assist the Court with understanding how the quoted portions of the description of the preferred embodiment in the Prodigy Patent anticipated step one of Claim 1 of the Hill Patent.

Aside from the vast differences in language used in the two patents, the Court is perplexed by the fact that CompuServe argues that Claim 1, a method claim referring to a main and a remote computer and their cooperation, is anticipated by a method describing multiple layers of structure and steps. Moreover, the cited text does not specifically refer to maintaining or updating any specific type of data that is related to at least one product in a memory of a main computer. As with the determination of infringement in a method patent, determining anticipation requires examining whether every step of the claimed method is disclosed in the prior art reference. *Glaverbel Societe Anonyme v. Northlake Marketing*, 45 F.3d 1550, 1554 (Fed. Cir. 1995) ¶ Anticipation requires identity of the claimed

process and a process of the prior art . . . including each step thereof . . . described or embodied . . . in a single reference.®). The interaction between the various computers in the Prodigy Patent appears to be very different from that disclosed in the Hill Patent, and these differences hinder a finding that the first step of Claim 1 was anticipated by the Prodigy Patent.

In an effort to identify constant and variable data in the Prodigy Patent, CompuServe pointed to another portion of the specification relating to AReception System Software.® See Ex. 18, Col. 82 l. 15, Col. 85, ll. 48-63. Therein is disclosed

Cacheable objects can be retained during the current user session, but cannot be retained between sessions. These objects usually have a moderate update frequency. Object storage facility 439 retains objects in the cache according to the LRU storage retention algorithm. Object storage facility 439 uses the LRU algorithm to ensure that objects that are least frequently used forfeit their storage to objects that are more frequently used.

Trashable objects can be retained only while the user is in the context of the partitioned application in which the object was requested. Trashable objects usually have a very high update frequency and must not be retained to ensure that the user has access to the most current data.

Ex. 18, Col. 85, ll. 48-63. According to CompuServe, the treatment of cacheable and trashable objects in the Prodigy Patent is equivalent to the storage and maintenance of variable data in the Hill Patent. CompuServe Mem. in Sup. at 18. Yet, CompuServe does not explain the difference between retention for a current session and retention while the user is in the context of a partitioned application, or how these two categories can be the same as variable data.

Hill's expert, however, considered the same portions of the Prodigy Patent and opined that some Aobjects®are Asomewhat like variable data,®while others are Asomewhat like constant data.® Ex.

43, *Dunsmore Rep. on Validity* at 2. Still other objects, he noted, were in a category that was not like either type of data in the Hill claims. *Id.* Those objects *permit* staging between sessions, making them unlike variable data, and had no version checking, making them unlike constant data. *Id.* Further, Dr. Dunsmore noted that the Hill Patent's claims all relate constant and variable data to an electronic catalog and products, whereas the Prodigy Patent's references to objects are not so limited. *Id.* In response, CompuServe points to the Court's *Markman* rulings about constant and variable data, emphasizing the aspect of how such data is classified (*i.e.*, in accordance with its relative likelihood of changing). The Prodigy Patent's objects, CompuServe argues, are similarly classified. Overlooked in this counter-argument is the part of the Court's definition that coincides with Dr. Dunsmore's opinion. Constant data is *product information* classified as likely to change less often than variable data, and variable data is *product information* classified as capable of changing at any time. *Markman* Order at 46 (emphasis added). The Court can discern no language in the Prodigy Patent that limits classification on the basis of the changeability of objects to data related to products in an electronic catalog.

Constant data in the Hill Patent, the defendant argues, is equivalent to the *stageable* objects of the Prodigy Patent. *Id.*

Stageable objects must not be subject to frequent change or update. They are retained between user sessions on the system, provided storage space is available and the object has not discarded [sic] by a least-recently-used (LRU) algorithm of a conventional type . . . which, in accordance with the invention, operates in combination with the storage candidacy value to determine the object storage priority, thus rendering

the stage self-configuring as described more fully hereafter. Over time, the self-configuring stage will have the effect of retaining within local disk storage those objects which the user has accessed most often. The objects retained locally are thus optimized to each individual user's usages of the applications in the system. Response time to such objects is optimized since they need not be retrieved from the interactive computer system.

Id. Col. 85, *ll.* 30-47. As with the variable data element, the passage describing what CompuServe claims is constant data in the Prodigy Patent is missing a key limitation relating the term to product information in an electronic catalog. Without this limitation, the Prodigy Patent cannot be seen as having anticipated the Hill Patent's concept of constant and variable data. Moreover, the description of *staging* seems different from storing constant data on a remote, in that staging is said to have the effect over time of *retaining within local disk storage* the objects the user accesses the most. It is also not clear from the quoted description where on the system the objects are retained. These differences lead away from a finding of anticipation.

As evidence that the alleged equivalents to constant and variable data in the Prodigy Patent are stored and maintained on a main computer, CompuServe identifies, in the *System Configuration* section of the Prodigy specification, a statement that *all active objects reside in file server.* *Id.* Col. 7, *l.* 64. It interprets this brief statement to mean that the Prodigy network's file server operates in the same manner as the main computer of the Hill Patent. No further explanation, evidence, or argument is offered to justify this interpretation. The Court finds it insufficient.

The parties also dispute the meaning of *objects* itself, and whether the term is the same as *data* in the elements of constant and variable data in the Hill Patent. In the *Object Language* section of the Prodigy specification, CompuServe located an explanation of what is contained in *objects*. According to CompuServe, objects contain text and graphics. Ex. 18, Prodigy Patent, Col. 39, *ll.* 37-43; Col. 10, *ll.* 66-68. It is true that the Prodigy Patent discloses objects that *specify format and provide content; i.e., the text and graphics, displayed on the user's screen so as to make up the pages that constitute the application.* *Id.*, Col. 39, *ll.* 40-43. However, upon further review, the Prodigy Patent also discloses that objects function to divide pages into partitions, describe windows that can be opened on pages, and contain applications that facilitate the data processing necessary to present pages. *Id.*, Col. 39, *ll.* 39-49. With all these tasks to accomplish, the objects of the Prodigy Patent are not the same as or similar to the Hill Patent's *data*.

Another example of CompuServe's creative paraphrasing relates to Claim 1, step one of the Hill Patent, which discloses a main revision status indicating the revision level of the constant data stored on the main computer. Ex. 1, Hill Patent, Col. 21, *ll.* 58-61. According to CompuServe, this claim element is *identical in form and substance to what is referred to as object storage and version identification control bytes* in the Prodigy Patent. CompuServe Mem. in Sup. at 18. As evidence of this statement, CompuServe points to several sections of the Prodigy specification, which disclose

object header 551 in preferred form is 18 bytes in length and contains a prescribed sequence of information which provides data regarding the object's identification, its anticipated use, association to other objects, its length and its version and currency.

* * *

Thereafter, a single byte . . . is allocated to identify the storage characteristic for the object; i.e., the criterion which establishes at what level in network 10 the object will be stored, and the basis upon which it will be updated. At least a portion of this byte; i.e.,

the higher order nibble (first 4 bits reading from left to right) is associated with the last byte . . . in the header which identifies the version of the object, a control used in determining how often in a predetermined period of time the object will be updated by the network.

* * *

Finally, and as noted above, header 551 includes a byte . . . which identifies the version of the object. Particularly the object version is a number to establish the control for the update of the object that are [sic] resident at reception system 400.

Ex. 18, Prodigy Patent, Col. 12, *ll.* 31-35; Col. 13, *ll.* 4-15, 19-23.

In a subsequent section, the specification adds detail to the preferred embodiment with respect to the coding of the objects. It discloses

Additionally, to assure currency of the information and transaction support provided at RS 400, objects are further coded for version identification and checking in accordance with a system of priorities that are reflected in the storage candidacy coding.

Specifically, to effect object storage management, objects are provided with a coded version id made up of the storage control byte and version control bytes identified above as elements of the object header, specifically bytes 16 and 18 shown in FIG. 4*b*. In preferred form, the version id is comprised of bytes 16 and 18 to define two fields, a first 13 bit field to identify the object version and a second three bite field to identify the object storage candidacy.

Ex. 18, Col. 86, *ll.* 24-37.

From this disclosure, the Court learns that objects have a complicated code that enables the disclosed software system of the Prodigy Patent to determine what to do with them. Objects may be placed on the reception system, which appears to be a user level, and either used only during one session, kept between sessions without being version checked, or kept between sessions and checked for currency. The objects= coding may also direct the software to keep them at a different level within

the network called the Acache concentrator,@ which is further up the hierarchy of the disclosed delivery system. In other words, the coding system contains more and different information than is contemplated by the term Arevision status@in the Hill Patent. CompuServe has not made it clear to the Court how the Prodigy Patent=s coding system is the same as the Hill Arevision status indicating the revision level of the constant data stored in the main computer.@

Rather than meet CompuServe=s challenge of its patent head on, Hill first attacks the Appendix included with CompuServe=s brief that purports to perform a step by step comparison of the Hill and the Prodigy patents. The trouble with CompuServe=s chart is that it does not offer any indicia of reliability with respect to its origin, and is best approached as an illustrative exhibit. As such, it serves as a finding tool, rather than as evidence. The Court has made limited use of this document, relying instead on the Prodigy Patent itself and the experts= testimony about it. For example, CompuServe=s own expert enumerated the claims he saw as anticipated by the Prodigy Patent, and the list did not include Claims 3, 4, 15-18, 21-26, or 35-39. Ex. 41, Johnson-Laird Rep. on Validity & 71. No evidence or testimony contradicts this opinion, and Dr. Dunsmore corroborates it, which negates a finding of anticipation with respect to any of these seventeen claims.

That the remaining Asserted Claims are not anticipated by the Prodigy Patent, Hill contends, is also supported by Dr. Dunsmore=s report. Specifically, Dr. Dunsmore found six limitations in the Hill Patent claims that are missing from the Prodigy Patent. Those six limitations include constant and variable data, selecting a product prior to transmitting the remote revision status, automatic connection and disconnection between the remote and the main computers, and transmitting a map with the variable data. Hill=s Brf. in Oppos. to Def.=s Mot. for Sum. J. on Validity at 21. The Court has already found

insufficient evidence to show that the Prodigy Patent anticipated constant and variable data as claimed in the Hill Patent, or that it disclosed a revision status term the same as or similar to how that term is used in the Hill Patent. Because the terms "constant and variable data" are common to all of the Asserted Claims, and "revision status" is common to all except Claims 15-18 and 35-37, the Court's findings suggest that CompuServe's evidence is insufficient to meet its burden of proving by clear and convincing evidence that the Hill Patent was anticipated by the Prodigy Patent.

Hill also points to Johnson-Laird's deposition as support that the Prodigy Patent discloses a system based on expiration dates, rather than version checking. This overstates Johnson-Laird's testimony. When asked about a section of the Prodigy Patent, Johnson-Laird agreed that it described an "expiree system," which is a system in which the data is checked to see how long it has resided on the remote computer, not whether it has changed. Ex. 22, Johnson-Laird Dep. at 246, 248-250. His specific response was it "certainly describes the expiree system. I think it may also describe some version related system." *Id.* at 248. After being asked to confirm that the revision status system in the Hill Patent was different from an "expiree system," Johnson-Laird then clarified his earlier response by saying, "My earlier response was, it describes both an expiree system and also a version of the checking system." *Id.* at 251. Although Johnson-Laird's testimony was not a model of clarity on this point, he certainly did not state that the Prodigy Patent only used the expiree system, as Hill suggested.

As the Court has observed, CompuServe's briefing set out a step by step comparison of the Hill Patent with the Prodigy Patent. While it was not considered as evidence, the comparison chart could have been a useful means of organizing the parties' analysis of the invalidity issue. At no point in its brief did Hill specifically counter any of those comparisons. Instead, Hill relied on general or global rebuttals

pointing to its own and CompuServe's experts' testimony. It would have been of greater assistance to the Court for Hill to have addressed CompuServe's comparisons more directly, given the technicality of the language in the Prodigy Patent.

Nevertheless, because there are so many gaps and unexplained differences between the Prodigy disclosures and those in the Hill Patent, the Court will not belabor the point or further lengthen this opinion with recitations of the other disclosures that do not lead to a finding of anticipation. Suffice it to say that the Court is not convinced that the claim element of storing is disclosed in the Prodigy Patent at all, as its descriptions of storing all contemplate involuntary removal of the stored objects.¹⁶ Nor is there sufficient evidence of an identifiable step of transmitting a remote revision status to the main computer for comparison with the revision status of the relevant constant data that is stored there. Moreover, Hill's expert specifically identified the lack of constant and variable data in the Prodigy Patent as a significant difference between the two and as evidence that the Prodigy reference did not anticipate Claims 1-5, 8-11, 15-18, 21-26, 30-32 and 35-39 of the Hill Patent (the Asserted Claims). Ex. 43, Dunsmore Report on Validity at 1-2. The only evidence CompuServe has to counter this is its own

¹⁶CompuServe points to one place in the Prodigy Patent specification it suggests discloses permanent storing, but the Court is not convinced the patent discloses the storing required by the Hill Patent. In a discussion of how the Prodigy system will handle dead objects, the description states, Aa sweeper control segment in the control object noted above can be used to act as a switch to turn the sweep of dead objects on and off.@ Ex. 18, Prodigy Patent, Col. 88, ll. 66-68. The context for this passage, however, refers to circumstances in which there is Adeployment of new versions of the reception system software containing new objects not yet supported on delivery system 20.@ *Id.* The concern appears to be that new objects loaded on the reception system that do not correspond to any objects on the delivery system, may be treated as Adead@ and prematurely Aswept@ off the reception system. *Id.* This is so unlike the Hill claims regarding storing constant data that it needs no further analysis.

interpretation of the Prodigy Patent, which the Court has found insufficient to meet CompuServe's burden with respect to validity.

For all of these reasons, the Court finds that CompuServe has failed to offer sufficient proof from which to find by clear and convincing evidence that the Prodigy Patent anticipated any of the Asserted Claims of the Hill Patent. This finding, however, does not mean that the Court has issued an opinion with respect to the Hill Patent's actual validity. Instead, it has found that CompuServe has failed to meet the burden of proof necessary to obtain a declaratory judgment of invalidity based on the Prodigy Patent. The difference is important. Adequate grounds for entering a judgment in favor of CompuServe in this case exist in the Court's findings of noninfringement. Thus, its finding that the defendant's counterclaim has failed to produce sufficient evidence to rebut the presumption of the Hill Patent's validity, is not necessary to the judgment. *See Hill-Rom*, 209 F.3d at 1344 (noting that district court's ruling on the invalidity defense was not incorporated in the judgment and would have no binding effect). As a result, CompuServe's motion for summary judgment on the issue of invalidity is **DENIED**, which defeats CompuServe's counterclaim for a declaratory judgment.

E. Indirect Infringement

The parties have fully litigated the issue of CompuServe's alleged direct infringement of the Hill Patent, and the Court has found that the patent was not infringed by CompuServe, either literally or by equivalents. That finding relied on the absence of the claim elements of storing and constant and variable data, as the Court has defined them. As noted, however, an alleged infringer could be found liable for actively inducing direct infringement by others, which is an *indirect* infringement. *See* 35

U.S.C. ' 271(b). A person may also indirectly infringe by knowingly providing components of a patented machine, combination, or material or apparatus for use in a patented process, thereby contributing to the direct infringement of the patent by others. *See* 35 U.S.C. ' 271(c). CompuServe's fourth motion for summary judgment addresses the issues of indirect infringement.

Common to both of the indirect infringement theories is the requirement that the patentee prove some type of direct infringement. *See Aro Mfg. Co. v. Convertible Top Replacement Co., Inc.*, 365 U.S. 336, 341 (1961) (Athere can be no contributory infringement in the absence of direct infringement.); *Serrano*, 111 F.3d at 1583 (same). In other words, Hill cannot succeed in proving indirect infringement without also proving that users of the CompuServe online shopping service directly infringe the Hill Patent. *See Sage Products, Inc. v. Devon Indus., Inc.*, 45 F.3d 1575, 1577 (Fed. Cir. 1995); *C.R. Bard*, 911 F.2d at 673. In fact, that is the Adispositive question@ in the analysis of this fourth motion for summary judgment. *Kendall Co. v. Progressive Med. Tech., Inc.*, 85 F.3d 1570, 1573 (Fed. Cir. 1996) (noting that dispositive question is whether purchasers of the defendant's system directly infringed the patent when they used the system). Neither form of Adependent infringement@ can occur without an act of direct infringement. *Joy Tech.*, 6 F.3d at 774.

Although the Court has considered and rejected the claims by Hill that CompuServe has directly infringed its patent by the sale and use of its online shopping service, that does not prevent Hill from attempting to prove that CompuServe either actively induced, or knowingly contributed to the direct infringement by its customers. For contributory infringement, in addition to the requirement of proving that CompuServe subscribers directly infringe its patent, Hill must also show that CompuServe provides its Internet access software and service for use in practicing the Hill Patent's electronic catalog method

and system. That showing involves proof that CompuServe's subscribers' use of its online service constitutes a material part of the invention, that CompuServe sold its software and service knowing that it is especially adapted for use in practicing the invention, and that the software and service are not a staple article or commodity of commerce suitable for substantial noninfringing use. See *C.R. Bard*, 911 F.2d at 673. To show active inducement, Hill must demonstrate that CompuServe had the actual and specific intent of causing the direct infringement of the Hill Patent. See *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990); *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1469 (Fed. Cir. 1990).

The parties have both argued and provided evidence relating to the elements of each of these indirect infringement theories, but the dispositive question remains whether Hill has shown any direct infringement. Had the Court found that CompuServe did not directly infringe the Hill Patent because it did not perform some of the steps of the patented method, there might have been some reason for a thorough analysis of the parties' arguments and consideration of their evidence. Instead, the Court has found that CompuServe does not infringe the Hill Patent because the accused system does not include the element of storing that is common to all of the Asserted Claims. Whether the Court is just looking at CompuServe's conduct, or at its contribution to or inducement of the conduct of its subscribers and the vendors who pay for space on the electronic mall, it would not matter. The absence of a critical claim element is fatal to any finding of direct infringement. Without a finding of direct infringement, there can be no indirect infringement.

Equally detrimental to Hill's claims is the fact that the Court found that the CompuServe online shopping service does not include the claim elements of constant and variable data, which also defeats a

finding of direct infringement by CompuServe's subscribers or any other third party using any part of CompuServe's system. There has been no evidence offered that any of CompuServe's subscribers supplied the missing claim elements, nor can the Court comprehend how an individual user could do so. Given these facts, the Court finds it unnecessary to address any of the specific issues raised by either party with respect to contributory infringement or the active inducement of infringement by others. Thus, CompuServe's motion for summary judgment on the issues related to indirect infringement is **GRANTED**.

IV. CONCLUSION

Before turning to the merits of this patent infringement case, the Court considered and decided four motions to strike. Hill's motion to strike filed on December 13, 1999, targeting certain evidence relied on by CompuServe in its summary judgment motions, has been **DENIED**. CompuServe's December 22, 1999, Aconditional@ motion to strike, that condition being if the Court granted Hill's first motion to strike, was considered **WITHDRAWN** because the Court denied Hill's first motion. Hill's January 7, 2000, motion to strike the affidavit of Andrew Johnson-Laird has been **DENIED**. The final motion sought to strike CompuServe's December 22, 1999, filing of three replies to Hill's responses to CompuServe's statements of material facts. Finding some aspects of those replies not in compliance with local rules, the Court has **GRANTED, in part** and **DENIED, in part**, the relief sought.

CompuServe filed four different summary judgment motions: 1) non-infringement based on the absence of the element of storing; 2) non-infringement based on the absence of classifying product information into Aconstant@ and Avariable@ data; 3) invalidity of the patent in suit based on anticipation by

a single prior art reference; and 4) non-infringement based on the absence of proof of indirect infringement. The Court has found that Hill has not produced sufficient evidence to create a genuine issue of material fact about the absence of the element of storing, and CompuServe's motion based on that ground is **GRANTED**. Nor did Hill succeed in raising a genuine issue of material fact on the issue of whether the CompuServe system included the classification of constant and variable data, and CompuServe's motion for summary judgment on that ground is also **GRANTED**.

The Court also considered CompuServe's motion for summary judgment on the issue of the Hill Patent's validity, which is a motion seeking the entry of a declaratory judgment of invalidity on CompuServe's counterclaim. Finding that CompuServe failed to produce sufficient evidence to meet its burden in overcoming the presumption of the patent's validity, the Court has decided that the Hill Patent was not anticipated by the Prodigy Patent, and has **DENIED** CompuServe's motion for summary judgment on its counterclaim. This ruling has the effect of defeating the counterclaim, but does not constitute a specific finding of validity of the Hill Patent.

Finally, the Court considered the issues relating to whether CompuServe indirectly infringed the Hill Patent by inducing or contributing to infringement by others. Because there can be no indirect infringement without a proof of direct infringement, and because the Court has found that CompuServe does not directly infringe the Hill Patent, CompuServe's motion for summary judgment on this issue has been **GRANTED**.

IT IS SO ORDERED this _____ day of _____, 2000.

LARRY J. McKINNEY, JUDGE
United States District Court
Southern District of Indiana

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