

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

-----  
HYPERPHRASE TECHNOLOGIES, LLC  
and HYPERPHRASE INC.

Plaintiffs,

OPINION AND ORDER

v.

02-C-0647-C

MICROSOFT CORPORATION,

Defendant.  
-----

In this civil action for monetary and injunctive relief, plaintiffs HyperPhrase Technologies, LLC and HyperPhrase, Inc. contend that defendant Microsoft Corporation's product, Microsoft Office XP, has infringed three of plaintiffs' patents relating to the storage and retrieval of information in computer systems. Plaintiffs bring their claim under 35 U.S.C. § 271. Jurisdiction is present. See 28 U.S.C. §§ 1331 and 1338.

Following a claim construction hearing held on May 22, 2003, I construed 12 terms in the disputed claims: "record," "data record," "hyperlink," "link," "linking," "keyword phrase," "hypertext linking reference," "identifying the referenced record," "associating," "modify block," "hyperlink phrase" and "limiting test block modification." June 18, 2003,

Op. and Order, dkt. #49, at 2. In addition, I concluded that two events must occur in “real time,” that is, as soon as the last word of the keyword phrase has been entered: (1) a “keyword phrase” and its “hypertext linking reference” must be recognized; and (2) a “data reference” must be “associat[ed]” with the “referenced record.” Id.

Presently before the court is defendant’s motion for summary judgment. Defendant argues both that no reasonable jury could find that it infringed any of the asserted claims in plaintiffs’ patents and that each of plaintiffs’ asserted patents is invalid for obviousness under 35 U.S.C. § 103. I conclude that plaintiffs have failed to show that there is a genuine issue of material fact with respect to whether defendant infringed plaintiffs’ patents. There is insufficient evidence to show that defendant’s product uses “hyperlinks,” “links” or “hypertext linking references,” that it “associat[es]” in real time a “data reference” and the “referenced record” or that it “identif[ies]” the referenced record when the data reference is identified. Because each of plaintiffs’ asserted claims requires at least one of these elements, defendant’s motion for summary judgment on infringement will be granted. It is therefore unnecessary to consider defendant’s invalidity defense.

From the parties’ proposed findings of fact and the record, I find the following facts to be undisputed.

#### UNDISPUTED FACTS

### A. Plaintiffs' Patents

Plaintiffs HyperPhrase Technologies, LLC and HyperPhrase, Inc. own the rights to three patents at issue in this case: U.S. Patents Nos. 5,895,461, 6,272,505 and 6,516,321. The '461 patent is directed to computer systems for automatically storing and retrieving data records. The preferred embodiment describes a system in a hospital environment in which plaintiffs' method can be used to store and link related medical records using hyperlinks to reduce user error. The '505 and '321 patents are directed to improvements of the method disclosed in the '461 patent, such as resolving ambiguity in recognized terms, using a variety of techniques.

In all, plaintiffs allege infringement of 48 claims. Eight claims are at issue in the '461 patent: claims 49-51, 53 and 56-59. Claim 49 is an independent claim of '461 patent; claims 50 and 51 are dependent on claim 49. They provide:

49. A computer system enabling users to reference data records on a database using hyperlinks, comprising:

at least one user interface interoperable with a processor for receiving data input by a user;

a word processor running on said processor;

a database in communication with said processor and storing a plurality of data records;

wherein said word processor is operable to recognize a first keyword phrase as said keyword phrase is input by a user through said user interface, said

keyword phrase being associated with a hypertext linking reference to at least one of said data records, said word processor further operable to establish said hypertext linking reference as a singularity which is removable when said keyword phrase is altered.

50. The computer system of claim 49, wherein said keyword phrase alteration results in a new hypertext linking reference when said identified keyword phrase is replaced with a different recognized keyword phrase.

51. The computer system of claim 50, wherein said new hypertext linking reference is a singularity removable when said different recognized keyword phrase is altered.

Claim 53 is an independent claim; claims 56-59 are dependent claims. They provide:

53. A computer system enabling users to create hypertext linking references between a first data record and a second data record stored on at least one database, comprising:

at least one user interface interoperable with a processor for receiving data input by a user in the form of a first data record;

at least one database in communication with said processor for storing a plurality of data records; and

a word processor running on said processor, wherein said word processor is operable to:

recognize a first keyword phrase input by a user through said user interface when creating said data record; and

recognize a second keyword phrase entered by the user into said first data record,

said first keyword phrase and said second keyword phrase establishing a first hypertext linking reference to a second data record stored on said at least one data base.

....

56. The computer system of claim 53, wherein said second keyword phrase is presented in an alternate textual format when recognized by the word processor.

57. The computer system of claim 56, wherein said word processor is further operable to establish said hypertext linking reference as a singularity which is removable when said second keyword phrase is altered.

58. The computer system of claim 57, wherein said alternate textual format is removed when said second keyword phrase is altered.

59. The computer system of claim 56, wherein said word processor is further operable to establish said hypertext linking reference as a singularity which is removable when said keyword phrase is altered.

Plaintiffs allege infringement of two claims in the '505 patent, claims 15 and 19, both of which are independent claims. Claim 15 provides:

A method for use with a computer having a word processor capable of allowing access to at least first and second separate word processor documents, displaying at least one of the first and second word processor documents on a screen for viewing, facilitating text block modification including both copying and moving of text blocks between the first and second documents and within either of the first or second documents, a text block defined by first and last designated characters and text therebetween, a text block to be modified being a modify block, the word processor also facilitating formation of hyperlinks between hyperlink phrases within a displayed document and other electronically stored hyperlink information identified by hyperlink addresses, the method for limiting text block modifications when either the first or last modify block character or the first and last modify block characters fragment a hyperlink phrase, the method comprising steps of:

monitoring the word processor commands;

identifying text block modification commands wherein either the first or last modify block character or the first and last modify block characters fragment a hyperlink phrase; and

when either the first or last modify block character or the first and last modify block characters fragment a hyperlink phrase, limiting the text block modification.

Claim 19 provides:

A method for use with a computer having a word processor capable of allowing access to at least first and second separate word processor documents, displaying at least one of the first and second word processor documents on a screen for viewing, facilitating text block modification including both copying and moving of text blocks between the first and second documents and within either of the first or second documents, a document receiving text being a receiving document, a text block to be modified being a modify block, wherein each modify block has a designation point within a receiving document, the X terms within the receiving document which are directly before the designation point are preceding terms, the X terms within the receiving document which are directly after the designation point are following terms, the first X terms in a modify block are first terms and the last X terms in a modify document are last terms, the word processor also facilitating formation of hyperlinks between hyperlink phrases within a displayed document and other electronically stored hyperlink information identified by hyperlink addresses, the method for avoiding creation of unintended new hyperlink phrases or inadvertently destroying hyperlink phrases which exist in the receiving document, the method further including the steps of:

monitoring word processor commands;

identifying text block modification commands wherein a completed modification would either destroy an existing hyperlink phrase by splitting the preceding and following terms or create a new hyperlink by combining the preceding and first terms or combining the last and following terms; and

when a completed modification would either destroy an existing hyperlink phrase by splitting the preceding and following terms or create a new hyperlink by combining either the preceding and first terms or combining the last and following terms, limiting the text block modification.

Plaintiffs allege infringement of 38 claims in the '321 patent: claims 1-7, 14-16, 19-21, 23-24, 26, 47-55, 83-85, 185-194. Claim 1 is an independent claim; claims 2-7, 14-16, 19-21, 23-24 and 26 are dependent claims of claim 1. They provide:

1. A method for identifying a referenced record referenced in a referencing record wherein the referenced record is referenced in the referencing record by at least a combination including a data reference (DR) and a modifier reference (MR), the method comprising the steps of:

(i) receiving the referencing record;

(ii) analyzing the referencing record to identify a DR, when a DR is identified:

(a) identifying an MR rule set (MRRS) specifying the relationship between an MR and the DR;

(b) analyzing the referencing record in accordance with the MRRS to identify the existence of the MR and, when the MR is identified;

(c) identifying the referenced record associated with the DR/MR combination.

2. The method of claim 1 wherein a specifying reference SR includes one of a DR/MR pair and a DR, at least one short SR consists of a portion of a long SR and, when a record segment which constitutes the short SR also constitutes a portion of the long SR, the step of identifying the DR includes identifying the DR corresponding to the long SR and, where the long SR includes an MR, the step of identifying the MR includes identifying the MR corresponding to the long SR.

3. The method of claim 1 for use with a database (DB) including at least one address format specifying an address format of the referenced record address, the method further including the step of using the address format to form an address for the DR/MR combination.

4. The method of claim 3 further including the step of using information from the

referencing record to form the address of the referenced record as specified by the address format.

5. The method of claim 1 wherein the step of analyzing includes searching the referencing record using natural language processing.

6. The method of claim 1 wherein the MRRS specifies a search range of data about the DR which is to be searched for an MR and the step of analyzing in accordance with the MRRS includes searching the range to identify the MR.

7. The method of claim 6 wherein at least the referencing record is a text document and the search range is a range of terms which precede and follow the DR.

....

14. The method of claim 1 wherein DRs may overlap and, when first and second DRs overlap, the method includes the step of identifying one of the first and second overlapping DRs.

15. The method of claim 14 wherein the step of identifying one of the first and second includes identifying the longest DR.

16. The method of claim 14 wherein the step of identifying one of the first and second includes identifying the first.

....

19. The method of claim 1 wherein MRs include text and at least one long MR includes a short MR and additional text and wherein, when the long MR appears in the text, the step of identifying the MR includes identifying the long MR.

20. The method of claim 1 wherein DRs include text and at least one long DR includes a short DR and additional text and wherein, when the long DR appears in the text, the step of identifying the DR includes identifying the long DR.

21. The method of claim 20 wherein MRs include text and at least one long MR includes a short MR and additional text and wherein, when the long MR appears in the text, the step of identifying the MR includes identifying the long MR.

....

23. The method of claim 1 wherein the step of receiving includes receiving the record as the record is created and the step of analyzing includes analyzing the record as the record is created.

24. The method of claim 1 further including the step of linking the record reference to the referenced record.

....

26. The method of claim 24 wherein the step of linking including modifying the appearance of the DR/MR combination and linking the DR/MR combination to the address of the referenced record such that, when the DR/MR combination is selected, the referenced record is provided.

Claim 47 is an independent claim; claims 48-55 are dependent on claim 47.

47. A method for identifying a referenced record referenced in a referencing record wherein the referenced record is referenced in the referencing record by at least a data reference (DR), the method comprising steps of:

as the referencing record is created:

(i) receiving the referencing record;

(ii) analyzing the referencing record to identify a DR; and

(iii) when a DR is identified, associating the DR and the referenced record.

48. The method of claim 47 wherein the step of associating includes determining the address of the referenced record and forming a link between the DR and the referenced record.

49. The method of claim 48 for use with a database including a table of DRs and associated record addresses and wherein the step of determining the address includes the steps of locating a DR in the table and correlating an address with the DR.

50. The method of claim 47 wherein the step of associating includes linking the DR to the referenced record.

51. The method of claim 50 wherein the step of associating includes modifying the appearance of the DR and linking the DR to the address of the referenced record such that when the DR is selected, the referenced record is accessed.

52. The method of claim 47 wherein DRs include text and at least one long DR includes a short DR and additional text and wherein, when the long DR appears in the text, the step of analyzing to identify the DR includes identifying the long DR.

53. The method of claim 47 wherein a modifier reference (MR) can be used in conjunction with a DR to reference a record and at least one record is referenced by a DR/MR combination and the method further includes the steps of:

after identifying the DR and prior to associating the DR, examining the record for an MR and, when an MR is identified, associating the DR/MR combination with the referenced record.

54. The method of claim 47 further including the steps of, after the step of associating, monitoring changes to the record and when an associated DR is modified, changing the association.

55. The method of claim 54 wherein the step of changing the association includes eliminating the association.

Claim 83 is an independent claim; claims 84 and 85 are dependent on claim 83.

They provide:

83. A method for use with a system capable of recognizing specifying references (SRs) in a record which reference [sic] another record and forming links between the SRs and the referenced records, the method for eliminating ambiguity when SRs overlap and comprising the steps of:

(i) receiving the referencing record;

- (ii) analyzing the referencing record to identify SRs;
- (iii) when two or more SRs overlap, enabling an operator to select at least one of the SRs;
- (iv) identifying the referenced records associated with the selected SRs; and
- (v) linking the selected SRs to corresponding records.

84. The method of claim 83 wherein the step of enabling includes providing an SR list indicating possible SRs and providing a tool for selecting a sub-set of the SRs.

85. The method of claim 84 wherein wherein the step of linking includes presenting the selected SRs in a selectable format and linking the SRs to corresponding records such that when an SR is selected, the corresponding record is provided.

Claim 185 is an independent claim; claims 186-189 are dependent on claim 185.

They provide:

185. A method for identifying a referenced record referenced in a referencing record wherein the referenced record is referenced in the referencing record by at least a data reference (DR), the method comprising the steps of:

- (i) receiving the referencing record;
- (ii) analyzing the referencing record to Identify a DR;
- (iii) when a DR is identified, associating the DR and the referenced record; and
- (iv) wherein DRs include text and at least one long DR includes a short DR and additional text and wherein, when the long DR appears in the text, the step of analyzing to identify the DR includes identifying the long DR.

186. The method of claim 185 wherein the step of analyzing includes analyzing the record as the record is created.

187. The method of claim 186 wherein the step of identifying includes displaying the DR in an alternative format.

188. The method of claim 186 wherein the step of associating includes one of creating a hyperlink between the DR and the referenced record and accessing the referenced record.

189. The method of claim 185 further including monitoring changes to the referencing record and when text proximate or within the DR is modified, repeating steps (ii) through (iv).

Claim 190 is an independent claim; claims 191 and 192 are dependent on claim 190.

They provide:

190. A method for identifying a referenced record referenced in a referencing record wherein the referenced record is referenced in the referencing record by at least a data reference (DR), the method comprising steps of:

(i) receiving the referencing record;

(ii) analyzing the referencing record to identify a DR;

(iii) when a DR is identified, associating the DR and the referenced record;  
and

(iv) wherein a modifier reference (MR) can be used in conjunction with a DR to reference a record and at least one record is referenced by a DR/MR combination and the method further includes the steps of:

after identifying the DR and prior to associating the DR, examining the record for an MR and, when an MR is identified, associating the DR/MR combination with the referenced record.

191. The method of claim 190 wherein the DR and MR of a DR/MR combination are adjacent.

192. The method of claim 190 wherein the DR and MR of a DR/MR combination are separated by at least one other word.

Claim 193 is an independent claim; claim 194 is dependent on claim 193. They provide:

193. A method for identifying a referenced record referenced in a referencing record wherein the referenced record is referenced in the referencing record by at least a data reference (DR), the method comprising the steps of:

- (i) receiving the referencing record;
  - (ii) analyzing the referencing record to identify a DR;
  - (iii) when a DR is identified, associating the DR and the referenced record;
- the method further including the steps of, after the step of associating, monitoring changes to the record and when an associated DR is modified, changing the association.

194. The method of claim 193 wherein the step of changing the association includes eliminating the association.

#### B. Defendant's Product

Microsoft Office XP is a suite of software products that includes Microsoft Word 2002 and Excel 2002. One of the features in these applications is called Smart Tags. The Smart Tags feature allows users to perform actions based on recognized text in a Word document or Excel spreadsheet. The feature includes two components: "recognizers" and "action handlers." The recognizers identify specific types of data in the document, including

names, dates, times, addresses, places, telephone numbers and stock ticker symbols. The recognized text becomes a Smart Tag. The Smart Tag is automatically assigned a data type (e.g., “place”) and is underlined with dots that are visible to the user. Different types of recognizers are assigned to “look for” different types of data.

Once text is recognized as a Smart Tag, the action handler for the particular type of data allows a user to request that certain actions be performed. The list of available actions is displayed only when the user selects the Smart Tag icon. To invoke the action handler, the user must hover the pointer over the recognized text until the Smart Tag icon appears and then click the mouse once on the icon. When the user clicks on the icon, a menu appears of the available actions for that particular data type. The actions for the “name” data type include “send mail,” “schedule a meeting,” “open contact,” “add to contacts” and “insert address.” To perform one of the listed actions, the user must click on it with the mouse. Selecting one action may lead to further choices. If the user selects the option, “schedule a meeting,” the action handler opens a file for scheduling meetings and inserts the person’s name in the file.

After the user selects one of the action items, nothing is done to the recognized Smart Tag to reflect the choice. If the user wants to access the same information again, he or she must repeat all of the same manual steps to do so.

Microsoft Word does not display all information about a document to the user. For

example, if a user types the letters “IN” into a document, in addition to the text, a hidden code is also embedded in the document: “<p class=MsoNormal>IN>/p>.” This text will appear only if the document is saved as Hypertext Markup Language (html) and then viewed in Notepad, a standard text editor. “<p class=MsoNormal>” indicates a paragraph, formatted normally.

If the user types “INTC” (the stock ticker symbol for Intel Corporation), the text is underlined with purple dots (visible to the user), meaning that the text has been recognized as a Smart Tag. (The parties dispute whether the recognition occurs in “real time,” that is, as soon as the text is entered by the user. Plaintiffs propose facts that it does, while defendant’s position is that the text is not recognized until the “sentence or paragraph is completed” or until “the system has resources available, as determined by prioritization of tasks and other factors.”)

Recognition causes the addition of the characters “<stl:stockticker>” to the embedded text. The embedded text would now provide: “<p class=MsoNormal><stl:stockticker>INTC</stl:stockticker></p>.” When the stock ticker tag is added, more embedded text appears at the top of the document: “xmlms:stl=‘urn:schemas-microsoft-com:office:smarttags.’”

An Extended Markup File exists that includes the following text:

<FL:action id=“LatestQuoteData”>

<FL:caption>Stock quote on MSN MoneyCentral</FL:caption>

<FL:url>[http://moneycentral.msn.com/redirect/moneycentraldirect.asp?pageid=SmartTag\\_1&Target=/scripts/webquote.dll?ipage=qd%26Symbol={TEXT}](http://moneycentral.msn.com/redirect/moneycentraldirect.asp?pageid=SmartTag_1&Target=/scripts/webquote.dll?ipage=qd%26Symbol={TEXT})</FL:url>  
</FL:action>.

## OPINION

Infringement analysis requires two steps. First, the court interprets the patent claims to determine their meaning and scope. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 967 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). Second, the properly construed claims are compared to the device accused of infringement. See id.; see also Cybor Corp. v. FAS Technologies, Inc., 138 F.3d 1448, 1453 (Fed. Cir. 1998) (en banc). A device infringes a patent claim if it contains every limitation set forth in that claim, either literally or by equivalence. See Johnson Worldwide Assocs., Inc. v. Zebco Corp., 175 F.3d 985, 988 (Fed. Cir. 1999).

Defendant focuses on four elements of plaintiffs' inventions that it contends are not present in Smart Tags: (1) "hyperlinks" and "links" (claims 49-51, 53 and 56-59 in the '461 patent; claims 15 and 19 of the '505 patent; claims 83-85 of the '321 patent); (2) the association of a "data reference" to another record in real time (claims 49-51, 53 and 56-59 in the '461 patent; claims 1-7, 14-16, 19-21, 23-24, 26, 47-55, 185-189, 190-192, 193-194

of the '321 patent); (3) multiple level searches in real time (claims 1-7, 14-16, 190-92 of the '321 patent); and (4) use of a "record" or "data record" (claims 53 and 56-59 of the '461 patent; claims 1-7, 14-16, 19-21, 23-24, 26, 47-55, 83-85, 185-189, 190-192, 193-194).

## A. Hyperlinks and Links

### 1. Literal infringement

Claims 49-51, 53 and 56-59 of the '461 patent and claims 15 and 19 of the '505 patent require a "hyperlink." Claims 49-51, 43 and 56-59 of the '461 patent require a "hypertext linking reference." Claims 83-85 of the '321 patent require "forming links" and "linking." In an opinion and order dated June 18, 2003, I construed "hyperlink" to mean "a keyword phrase, an address and information stored at that address" and I construed "hypertext linking reference" to mean "the address associated with the keyword phrase." In addition, I construed "link" and "linking" to mean "creating a hypertext link or address association." Thus, a common element of these claims is that they all require an address. Defendant asserts that its Smart Tags do not have an address and, therefore, they do not infringe any of these claims.

Plaintiffs disagree and point to the stock ticker Smart Tag. (This is the only example plaintiffs use.) They note that in Microsoft Word, when text is recognized as a stock ticker Smart Tag, the characters "<st1:stockticker>" appear embedded in the text. However,

according to defendant, the stock ticker symbol

is not an address. The tag does not point to, link to or locate anything. It simply indicates that the underlined term is a recognized Smart Tag ticker symbol. That way, if the user later decides to invoke the Smart Tag feature, the software knows to present the user with only those actions that relate to ticker symbols, such as looking up the stock price.

Aff. of Higashiyama, dkt. #78, Exh. L, at ¶6. Although plaintiffs argue that the stock ticker symbol *is* an address, they have presented no evidence to support this conclusion, other than an affidavit by their expert, who avers, without explanation, that the symbol is an address. This is insufficient. Under Fed. R. Civ. P. 56(e), plaintiffs must support their claim with *specific* facts. They cannot rely on the same conclusory allegations contained in their complaint. See Lujan v. National Wildlife Federation, 497 U.S. 871, 888 (1990) (“The object of [summary judgment] is not to replace conclusory allegations of the complaint or answer with conclusory allegations of an affidavit.”).

In the alternative, plaintiffs point to the text that becomes embedded at the top of the document when the Smart Tag is recognized: “xmlms:stl=‘urn:schemas-microsoft-com:office:smarttags.’” Plaintiffs argue that this embedded text is an address because it points to a database called office:smarttags, which “includes a record containing a worldwide web address which will permit the typist to retrieve records including information about Intel stocks.” Plts.’ Prop. Find. of Fact, dkt. #77, at 12, ¶¶33, 35. Assuming that there is a database called “office:smarttags” (and defendant denies that there is), plaintiffs have

proposed no facts showing that the keyword phrase is linked to that database. As noted above, a hyperlink is a keyword phrase, an address and information stored at that address. To establish that Smart Tags are hyperlinks, it is not enough for plaintiffs to show that each of the components of a hyperlink exist in isolation somewhere in defendant's product. The address and information at that address must be linked to the keyword phrase. Such a link is not established by showing that, when text is recognized as a Smart Tag, embedded text appears at another part of the document that refers to a database with information in it. The facts show that a user cannot link to information related to the stock ticker tag until that user hovers the mouse pointer over the recognized text, clicks on the icon that appears over the text and then clicks again on one of the options that appear.

This same problem dooms to failure plaintiffs' third argument, which is that stock ticker Smart Tags have an address because, inside the "office:smartrtags" database, there is the following text:

```
<FL:action id="LatestQuoteData">  
    <FL:caption>Stock quote on MSN MoneyCentral</FL:caption>  
<FL:url>http://moneycentral.msn.com/redirect/moneycentraldirect.asp?pageid=SmartTag_1&Target=/scripts/webquote.dll?ipage=qd%26Symbol={TEXT}</FL:url>  
</FL:action>
```

Plaintiffs suggest that this text includes a uniform resource locator, and that the URL is an

address that is encompassed by the claims in plaintiffs' patents. Again, the fact that a reference to a URL exists somewhere in defendant's product is not enough to create an issue of fact on the issue of infringement. Furthermore, plaintiffs have not presented any evidence that this alleged URL goes anywhere. According to defendant, the {TEXT} portion of the URL must be replaced with a stock ticker symbol before there is a functioning URL. Regardless, even if the URL is an address in fact, plaintiffs have failed to present any evidence that the address is part of a hyperlink. Plaintiffs have not shown that any part of defendant's product is a keyword phrase, an address and information stored at that address. Therefore, I conclude that defendant has not literally infringed any asserted claims that include a hyperlink, which are claims 49-51 of the '461 and claims 15 and 19 of the '505 patent.

Claims 53 and 56-59 of the '461 patent do not require hyperlinks. However, they do require a "hypertext linking reference," which is "the address associated with a keyword phrase." (A "keyword phrase" is a "recognized text string that serves as the hypertext link." June 18, 2003 Op. and Order, dkt. #49, at 10. Defendant does not appear to deny that text recognized as a Smart Tag is equivalent to a "keyword phrase" as defined in the June 18 opinion and order.) Similarly, claims 83-85 of the '321 patent require the formation of "links between the SRs and the referenced record." "SR" is an abbreviation for "specifying reference," which the parties agree is one type of keyword phrase. Again, plaintiff has

proposed no facts showing an association or link between a keyword phrase and an address or record in defendant's product. Therefore, I conclude that plaintiffs have failed to show that there is a genuine issue of material fact with respect to whether defendant literally infringed claims 53 and 56-59 of the '461 patent and claims 83-85 of the '321 patent.

## 2. Doctrine of equivalents

Under the doctrine of equivalents, "a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." Warner-Jenkinson Co. v. Hilton Davis Chemicals Co., 520 U.S. 17, 21 (1997). The doctrine requires a plaintiff to demonstrate more than a broad, overall equivalence between an accused product and a patented invention. Rather, "[ e]ach element contained in a patent claim is deemed material to defining the scope of a 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. "An element in the accused product is equivalent to a claim limitation if the differences between the two are 'insubstantial' to one of ordinary skill in the art. Insubstantiality may be [established by showing that] the accused device 'performs substantially the same function in substantially the same way to obtain the same result' as the claim limitation." Catalina Marketing Int'l v. Coolsavings.com,

Inc., 289 F.3d 801, 812-13 (Fed. Cir. 2002) (citations omitted).

The doctrine of equivalents exists to insure fairness to both patent holders and competitors. Limiting the scope of a patent claim to its literal meaning could allow others to escape from liability for patent infringement on the most technical grounds. Because of “language’s inability to capture the essence of innovation,” it is sometimes necessary to go beyond the literal meaning of a claim’s terms to determine whether a patent has been infringed. Festo Corp. v. Shoketsu Kogyo Kabushiki Co., Ltd., 535 U.S. 722 (2002). At the same time, the doctrine of equivalents is not to be applied so liberally that it traps competitors who believed reasonably that they were acting lawfully. Charles Greiner & Co., Inc. v. Mari-Med Manufacturing, Inc., 962 F.2d 1031 (Fed Cir. 1992) (“[C]areful confinement of the doctrine of equivalents to its proper equitable role . . . promotes certainty and clarity in determining the scope of patent rights.”).

Plaintiffs argue that the doctrine of equivalents should apply because what they refer to as defendant’s “address” (e.g., “stl:stockticker”) performs substantially the same function as plaintiffs’ address in substantially the same way to achieve substantially the same result. See Ethicon Endo-Surgery v. United States Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998). More specifically, plaintiffs contend that both “addresses” “tell the computer where to go for information outside the document” (function), that both addresses associate keywords with the location of information (way) and that both retrieve information from

an internet browser (result). However, the only evidence plaintiffs adduce to support this argument consists of conclusory assertions by their expert. See, e.g., Aff. of Mark Joseph, at ¶¶ 202-03, attached to Aff. of William Flachsbart dkt. #69, at Exh. 6 (“The function of the ‘address’ in the HyperPhrase patents is to tell the computer where to go for information outside the document.” “The function of the database address in Smart Tags is the same.”) Again, to succeed in showing that there is a genuine issue of material fact, plaintiffs must do more than restate the legal standard and then declare that it has been satisfied.

I agree with plaintiffs that the results of its patented inventions and defendant’s Smart Tags are similar. In the end, both products can serve to link one document to another. However, the doctrine of equivalents is not so sweeping that it applies whenever two products’ overall function or result is the same. As noted above, “the doctrine of equivalents must be applied to individual elements of the claim, not the invention as a whole.” Warner-Jenkinson, 505 U.S. at 21. If the end result were the only relevant comparison, patent disputes would be far more prevalent than they already are (and plaintiffs’ patents would almost certainly be invalidated by prior art). Plaintiffs have failed to adduce any evidence that the characters “st1:stockticker” in defendant’s Smart Tags are equivalent to an address in plaintiffs’ patents. Without a showing that these characters are linked with information located outside the document, I cannot include that they are equivalent to an address. Accordingly, I conclude that defendant does not infringe claims

49-51, 53 and 56-59 of the '461 patent, claims 15 and 19 of the '505 patent or claims 83-85 of the '321 patent under the doctrine of equivalents.

## B. Real Time

### 1. Literal infringement

In the June 18 opinion and order, I concluded that both the “keyword phrase” and its “hypertext linking reference” (the address) must be recognized in real time, that is, as soon as the last word of the keyword phrase has been typed. June 18 Op. and Order, dkt. #49, at 14. In addition, I concluded that the '321 patent required that the “data reference” and the “referenced record” be “associat[ed]” in real time. Id. at 15. (The parties appear to agree that a “data reference” is one type of a keyword phrase or a term included in a keyword phrase.) Defendant argues that its Smart Tags do not literally infringe any claim that requires a link or association in real time between recognized text and a record located outside the document. I agree.

My conclusion on this issue follows from the previous one. Plaintiffs’ argument that Smart Tags are linked or associated with another record in real time is premised on acceptance of its earlier argument that recognized text in Office XP includes an address to another location. Although there is a genuine dispute whether Smart Tags are *recognized* in real time, plaintiffs have adduced no evidence that, once Smart Tags are recognized as such,

they also become associated with another record. The closest plaintiffs come is to refer again to a URL that they allege is referred to in the “office:smartrtags database.” They point out that in the June 18 opinion and order, I construed “associating the DR and the referenced record” in the ‘321 patent as creating “a relationship that is broader than linking.” Thus, they argue, even if there is no direct link between the recognized text and the web page (the “referenced record”), there is at least an “association.”

Plaintiffs’ argument is unpersuasive. To get to the information located on the web page, a user must go through additional steps beyond clicking on the recognized text. The facts do not show that, at the time text is recognized as a Smart Tag, a relationship is established between the recognized text and the information on the web page. At most, plaintiffs have shown that, somewhere in defendant’s product, there exists a database that includes, among other things, an incomplete URL that may be used at some point in the process. However, plaintiffs have failed to show any connection between this URL and the recognized text that occurs *at the time the text is recognized*. At that point, the two records are related only in the sense that recognizing the text is a necessary step in the process of linking to the web page. The actual association between the records does not occur until the user takes further action. Although the meaning of “associating” is broader than “linking,” it is not unbounded. At the very least, plaintiffs must show that, at the time of recognition, the text and the other record are somehow brought together in a tangible way. See Webster’s

Ninth New College Dictionary 110 (1983) (defining “associate” as “to bring together or into relationship in any various and tangible ways”). Plaintiffs have failed to do this.

Claims 47, 185, 190 and 193 of the ‘321 patent all include the step of “when a DR is identified, associating the DR and the referenced record.” Claims 48-55, 186-89, 191-92 and 194 are dependent on those claims. Accordingly, I conclude that defendant’s product does not literally infringe any of those claims. Claim 1 of the ‘321 patent includes a similar step: “identifying the referenced record” “when a DR is identified.” Claims 2-7, 14-16, 19-21 and 24-26 are dependent on claim 1. In the June 18 opinion and order, I construed “identifying the referenced record” to mean “locating or finding the record.” Again, there is no evidence that defendant’s product locates a record at the time of recognition. Therefore, I conclude that defendant does not literally infringe these claims.

## 2. Doctrine of equivalents

Plaintiffs offer virtually no argument that the doctrine of equivalents should apply on this issue, except to state that, “Whatever nuance Microsoft might rely upon to argue a literal difference must necessarily be only an insubstantial difference.” Plts.’ Br., dkt #64, at 57. (Although plaintiffs argue at length why they should not be estopped from asserting an equivalency argument, they do not explain in the first instance how defendant’s product infringes under the doctrine of equivalents.) Accordingly, I conclude that plaintiffs have

failed to raise a genuine issue of material fact on the issue whether defendant's product infringes plaintiffs' asserted claims under the doctrine of equivalents.

All of plaintiffs' asserted claims require a hyperlink, a hypertext linking reference, a link, linking, associating with a record in real time or locating a record in real time. Because I have concluded that plaintiffs have failed to adduce evidence that defendant's product includes any of these elements, it is unnecessary to consider defendant's remaining arguments on infringement or their argument that plaintiffs' patents are invalid. Defendant's motion for summary judgment will be granted.

#### ORDER

IT IS ORDERED that defendant Microsoft Corporation's motion for summary judgment is GRANTED. The clerk of court is directed to enter judgment in favor of defendant and close this case.

Entered this 24th day of September, 2003.

BY THE COURT:

BARBARA B. CRABB  
District Judge