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.

- -

This is a civil action in which plaintiffs Hyperphrase Technologies, LLC and Hyperphrase Inc. contend that defendant Microsoft Corporation infringed U.S. Patent No. 5,895,461, No. 6,272,505, No. 6,308,171 and No. 6,516,321, which are directed to a computer system in which data records are created, stored and retrieved on databases using a word processor that recognizes entered keyword phrases and associates those phrases with the addresses of the data records. Defendant filed a counterclaim, seeking a declaratory judgment of non-infringement and invalidity of plaintiffs' patents. Jurisdiction is present. 28 U.S.C. §§ 1331 and 1338.

The case is presently before the court for a ruling on the construction of certain claims

1

within the patents. A claim construction hearing was held on May 22, 2003. In addition, plaintiffs have filed a motion to voluntarily dismiss with prejudice all claims relating to the '171 patent. The motion will be granted.

Taking into consideration the patents, their prosecution history and the arguments made by the parties in their claim construction briefs and at the hearing, I construe (1) "record" and "data record" to mean components of a database composed of fields arranged in a particular predefined structure; (2) "hyperlink" to mean a keyword phrase, an address and information stored at that address; (3) "link" and "linking" to mean creating a hypertext link or address association; (4) "keyword phrase" to mean a recognized text string that serves as the hypertext link; (5) "hypertext linking reference" to mean the address associated with the keyword phrase; (6) both "keyword phrase" and its "hypertext linking reference" to be recognized in real time; (7) "when a DR is identified, associating the DR and the referenced record" to occur in real time; (8) "identifying the reference record" to mean "locating or finding the record"; (9) "associating the DR and the referenced record" to create a relationship that is broader than "linking"; (10) "modify block" to mean a contiguous portion of text that can be selected by word processor commands to be deleted, moved or copied; (11) "hyperlink phrase" to be equivalent to "keyword phrase," which is a recognized text string that serves as the hypertext link; and (12) "limiting text block modification" to

2

occur whenever a hyperlink phrase would be affected by a conventional editing routine.

OPINION

A. Canons of Claim Construction

Infringement analysis begins with construction of the claims at issue. See Vitronics

Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); Markman v. Westview

Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996).

It is a legal determination to be made by the court. See Vitronics, 90 F.3d at 1582. "It is

well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic

evidence of record, i.e., the patent itself, including the claims, the specification and, if in

evidence, the prosecution history." Id. Construction of the disputed terms begins with the

language of the claims themselves. Generally, "all terms in a patent claim are to be given

their plain, ordinary and accustomed meaning to one of ordinary skill in the relevant art."

Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001). Moreover, "unless

compelled to do otherwise, a court will give a claim term the full range of its ordinary

meaning as understood by an artisan of ordinary skill." Id.

In many instances, however, a court must proceed beyond the bare language of the

claims and examine the patent specification. The specification serves an important role in

arriving at the correct claim construction because it is in the specification that the patentee

provides a written description of the invention that allows a person of ordinary skill in the art to make and use the invention. Markman, 52 F.3d at 979. In particular, the specification must be consulted because "patent law permits the patentee to choose to be his or her own lexicographer by clearly setting forth an explicit definition for a claim term that could differ in scope from that which would be afforded by its ordinary meaning." Rexnord, 274 F.3d at 1342; Vitronics, 90 F.3d at 1582 ("a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history"). Although the patent specification does not broaden or narrow the invention, which is specifically laid out in the patent's claims, the specification may be used to interpret what the patent holder meant by a word or phrase in the claim. E.I. Du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed. Cir. 1988); see also Vitronics Corp., 90 F.3d at 1582 (when term is not specifically defined in claims, it is necessary to review specification to determine whether inventor used term inconsistently with its ordinary meaning).

After considering the claim language and the specification, a court may consider the final piece of intrinsic evidence, the patent's prosecution history. Vitronics, 90 F.3d at 1582. "[S]tatements made during the prosecution of a patent may affect the scope of the invention." Rexnord, 274 F.3d at 1343. Typically, analysis of the intrinsic evidence will

eliminate any ambiguity in the claim terms, rendering unnecessary any reference to extrinsic evidence, such as expert testimony, inventor testimony, dictionaries, technical treatises and articles. Vitronics, 90 F.3d at 1583. However, a court may find it helpful to consult extrinsic evidence to be sure that its claim construction "is not inconsistent with clearly expressed, plainly apposite, and widely held understandings in the pertinent technical field." Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1309 (Fed. Cir. 1999). On the other hand, courts are "not to rely on extrinsic evidence in claim construction to contradict the meaning of claims discernible from thoughtful examination of the claims, the written description, and the prosecution history." Id. at 1308. Generally, the prosecution history is relevant if a particular interpretation of the claim was considered and specifically disclaimed during the prosecution of the patent. Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 30 (1997); Vitronics, 90 F.3d at 1582-83.

B. Claim Construction

1. Record and data record ('461 patent, claims 49 and 53)

Plaintiffs define "record" and "data record" as "data accessible by a processor." (The parties agree that the terms "record" and "data record" are used interchangeably throughout the '461 patent.) However, because plaintiffs' definition does not meaningfully distinguish the disputed terms from "data," it is too broad. In other words, adopting plaintiffs' proposed

construction would have the effect of making the narrower term "data record" synonymous with the broader term "data." See Ethicon Endo-Surgery, Inc. v. United States Surgical Corp., 93 F.3d 1572, 1583 (Fed. Cir. 1996) ("[Plaintiff] need not have included this limitation in its claim. Having done so, it must live with the language it chose.").

Defendant defines "record" and "data record" as "components of a database composed of fields in a predefined structure." At the claim construction hearing, plaintiffs conceded that a record or data record could be made up of fields in a "predefined structure," so long as that definition is construed broadly enough to encompass the examples articulated in the specification, such as x-ray data stored as an image file, nurse's reports and output of patient monitoring devices such as electrocardiographs. (Defendant acknowledges that its use of the word "predefined" does not mean that a record is in some way static or unchanging in nature.) Specifically, plaintiffs expressed concern that the examples recited in the patent's specification are either generic images or word processing files that may not be construed as "fields in a predefined structure." Thus, plaintiffs argued, adopting defendant's construction would exclude the preferred embodiment, which would be an inaccurate interpretation. See Vitronics, 90 F.3d at 1583 (construction that necessarily excludes the preferred embodiment "is rarely, if ever, correct"); see also Hoechst Celanese Corp. v. BP Chemicals, Ltd., 78 F.3d 1575, 1581 (Fed. Cir. 1996) (unlikely that inventor would define invention in way that excludes preferred embodiment or that those skilled in

the art would read it that way). However, I concluded at the hearing that the examples recited in the specification would fit within defendant's definition. Accordingly, "record" and "data record" as used in claims 49 and 53 of the '461 patent mean components of a database composed of fields arranged in a particular predefined structure.

2. Hyperlink ('461 patent, claim 49 and '505 patent, claims 15 and 19)

Plaintiffs argue that the word "hyperlink" should be construed as "a phrase, an address and information stored at each address." (Plaintiffs agreed at the claim construction hearing that "operations" may be removed from the definition they proposed in their brief.) Although defendant defined "hyperlink" as "an anchor, address and destination information" and plaintiffs defined it as "a phrase, address and information," the parties appeared to agree at the hearing that the dispute was one of nomenclature only. In fact, defendant admitted that the important point was that the term "hyperlink" be construed as having three components notwithstanding the labels on these components. Although I tend to prefer defendant's terminology, because the inventor did not use the words "anchor" or "destination information" in the patents, I will use plaintiffs' terminology (that is, a keyword phrase, an address and information stored at that address).

One final point needs to be addressed. Defendant argues that "hyperlink" includes the requirement that "upon selection of the anchor [keyword phrase] by a user, the computer

directly and immediately accesses the address to retrieve the destination information and display it to the user." Plaintiffs argue that adopting a "direct and immediate" qualifier as part of the definition would limit the invention by, for example, allowing only one-click access rather than two-click access. Because the claims at issue do not limit the access as either direct or immediate, I will not read defendant's proposed limitations into the disputed claims. Accordingly, "hyperlink" in claim 49 of the '461 patent and claims 15 and 19 of the '505 patent means a keyword phrase, an address and information stored at that address.

3. Link and linking ('321 patent, claim 83)

> Claim 83 of the '321 patent provides that:
>
> A method for use with a system capable of recognizing specifying references (SRs) in a record which reference 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 . . . *linking* the selected SRs to corresponding records.

'321 Patent, at 40:12-24 (emphasis added).

Plaintiffs argue that "link" and "linking" mean "to couple or connect" and that in the context of the '321 patent, "linking" can be accomplished by "creating a hypertext link, address association or other logical link." In contrast, defendant argues that the term "link" is synonymous with the term "hyperlink." However, there are two problems with defendant's posture. First, as discussed earlier, hyperlink is made up of three components,

a keyword phrase, an address and information stored at that address. Examining the use of the terms "link" and "linking" in the disputed claim, one can see that a link is formed *between* two components, that is, between the specifying reference and corresponding record. Thus, a link (a connection between two component parts) and a hyperlink (three component parts that include a link or address) could not be interpreted as synonymous. Although I agree with most of plaintiffs' proposed construction, I will not include any "other logical link" as part of the definition because this part of the definition is too nebulous. Accordingly, "link" and "linking" in claim 83 of the '321 patent means creating a hypertext link or address association.

4. Keyword phrase ('461 patent, claims 49 and 53)

Defendant defines "keyword phrase" as "an element of a predefined list of word phrases, which serves as the anchor [keyword phrase] for a hyperlink" while plaintiffs define it as "a recognized text string that is to be converted into a hypertext phrase." Thus, plaintiffs object to defendant's insertion of the word "predefined" as well as its use of "list of word phrases" rather than "recognized text string."

Plaintiffs argued at the claim construction hearing that in some situations a keyword phrase is created using a rule rather than merely matching from an existing, predefined list of words. For example, plaintiffs noted that if a new patient identification is entered into

the system (using a recognized format, such as "patient ID 987654321"), the program would recognize this text string configuration as a keyword phrase even though this particular patient identification (or keyword phrase) did not exist previously. Although the inventor sometimes modified the terms "keyword phrase" with the adjectives "defined" and "predetermined" in the specification, claims 49 and 53 of the '461 patent do not articulate such a limitation. It is well established that "the language of the claim defines the scope of the protected invention." Bell Communications Research, Inc. v. Vitalink Communications Corp., 55 F.3d 615, 619 (Fed. Cir. 1995) (citing Yale Lock Mfg. Co. v. Greenleaf, 117 U.S. 554, 559 (1886) and Autogiro Co. of Am. v. United States, 384 F.2d 391, 396 (Ct. Cl. 1967) ("Courts can neither broaden nor narrow the claims to give the patentee something different than what he set forth [in the claim].")).

Finally, contrary to defendant's assertion, a patient identification number is not a "word phrase" but rather a "text string." Adopting a "list of word phrases" rather than a "recognized text string" as part of the definition of keyword phrase would circumscribe the use of an alphanumeric patient identification number. Moreover, the patent makes it clear that the use of an alphanumeric patient identification is the preferred embodiment. As stated earlier, a construction that necessarily excludes the preferred embodiment "is rarely, if ever, correct." Vitronics, 90 F.3d at 1583. Accordingly, "keyword phrase" means a recognized text string that serves as the hypertext link.

5. Hypertext linking reference ('461 patent, claims 49 and 53)

The parties dispute whether the phrase "hypertext linking reference" refers to the address associated with the keyword phrase (defendant's position) or to both the keyword phrase and the address associated with the keyword phrase (plaintiffs' position). Claim 49 of the '461 patent reads "said keyword phrase being associated with *a hypertext linking reference*." Substituting plaintiffs' proposed definition in claim 49 would produce the reading: "said keyword phrase being associated with *said keyword phrase and an address*." As this substitution illustrates, plaintiffs' proposed construction is nonsensical. It would result in the tautological construction that the keyword phrase would be associated with itself. Moreover, plaintiffs' proposed construction defies assertions the inventor made during the patent's prosecution. See Warner-Jenkinson, 520 U.S. at 30 (prosecution history is relevant if inventor considered particular interpretation during prosecution of patent and specifically disclaimed it); Vitronics, 90 F.3d at 1582-83. In particular, the prosecution history indicates that the inventor treated the phrase "hypertext linking reference" as synonymous with the uniform resource locator. See Aff. of Craig Smith, Exh. D, July 28, 1998 Resp. to Office Action, at 5 (remarking that "the hypertext linking reference, *or URL*, is fixed until the hypertext reference viewable by the user is deleted or changed") (emphasis added). Because of the prosecution history and plaintiffs' concession at the claim construction hearing that a uniform resource locator is the address, defendant's construction will be adopted.

11

Accordingly, "hypertext linking reference" in claims 49 and 53 of the '461 patent means the address associated with the keyword phrase.

6. <u>As and when to establish a hypertext linking reference ('461 patent, claims 49 and 53)</u>

The parties dispute whether a hypertext linking reference (the address associated with the keyword phrase) must be established in real time, that is, as soon as the last word of the keyword phrase has been entered. Although plaintiffs concede that a keyword phrase itself is recognized in real time, they argue that the hypertext linking reference need not be created in real time. Claim 49 of the '461 patent reads as follows:

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

'461 Patent, at 18:42-56 (emphasis added). Claim 53 reads as follows:

> 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:
>> * * *
>> 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

12

interface *when* creating said first data record; and

recognize a second keyword phrase entered by a 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 database.

'461 Patent, at 19:1-20 (emphasis added).

Defendant points out that in order to overcome a prior art rejection, the inventor offered the very definition of "as" and "when" that plaintiffs now seek to disavow. Specifically, defendant notes the following response from the patent examiner:

As pointed out in the previous Response, Applicants' invention is quite different from Vasudevan's federated naming system for a variety of reasons, and particularly in that Applicants' invention is a "real-time" processing system. The claims recite that keywords and keyword phrases are recognized "as" they are entered or "when" they are entered by the user, i.e., they are recognized as soon as their entry by the user is complete.

See Aff. of Craig Smith, Exh. H, Nov. 19, 1998 Resp. B, at 1. Although this cited response does not give definitive support to defendant's proposed construction (because it refers only to the recognition time of *keywords* and *keyword phrases*), the examiner's earlier response clears up any ambiguity:

Applicants have developed a real-time processing system that uses keyword phrases entered into a file by the user to determine an address where that file is to be stored. As such, it operates prospectively, and is not merely a file retrieval apparatus. In another aspect, it recognizes keyword phrases that point to, or refer to, other files stored (or to be stored) on the system and *establishes a hyperlink to that file in real time*.

13

See id. at Exh. D, July 21, 1998 Resp., at 6 (emphasis added). This prosecution history

defeats plaintiffs' argument that a hyperlink linking reference is not created in real time. See

Markman, 52 F.3d at 980 ("court has broad power to look as a matter of law to the

prosecution history of the patent in order to ascertain the true meaning of language used in

the patent claims"). Accordingly, in claims 49 and 53 of the '461 patent, a keyword phrase

and its hypertext linking reference must both be recognized in real time, that is, as soon as

the last word of the keyword phrase has been entered.

7. When a DR is identified ('321 patent, claims 1, 47, 185, 190 and 193)

Plaintiffs assert that certain steps take place "*when* a DR [data reference] is identified"

and other steps take place "*as* the referencing record is created." Although plaintiffs concede

that the word "as" requires real-time processing, they dispute whether the word "when" also

requires real-time processing. Claim 47 of the '321 patent, for example, provides that:

> 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:
>   *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.

'321 Patent, at 36:37-46 (emphasis added).

The parties do not dispute that "receiving" or "analyzing" the referencing record must be performed in real time. The patent examiner's response is clear on this point. <u>See</u> Aff. of Craig Smith, Exh. N, July 3, 2002 Response to Office Action, at 8 ("Applicant has amended each of claims 47 and 137 to now require that the steps of receiving and analyzing are performed in <u>real time</u>.") (Emphasis in original.) However, plaintiffs argue that because the patent examiner failed to mention "associating" in his response ("*when* a DR is identified, *associating* the DR and the referenced record" in step three (iii)), this step need not occur in real time. I disagree. In order to overcome a prior art rejection for lack of a real-time element, the inventor amended the '321 patent by adding "as the referencing record is created" and the word "and" between steps two (ii) and three (iii). Thus, the patent examiner required all three steps after the phrase "as the referencing record is created" to occur in real time. Accordingly, in the '321 patent, "when a DR is identified, associating the DR and the referenced record" occurs in real time.

8. <u>Identifying the referenced record ('321 patent, claims 1 and 83)</u>

At the claim construction hearing, the parties agreed that "identifying the reference record" in claims 1 and 83 of the '321 patent means "locating or finding the record."

9. Associating the DR and the referenced record ('321 patent, claims 47, 185, 190 and 193)

The parties agree that "associating the DR and the referenced record" creates a relationship between the DR and the referenced record and that the term "associating" is broader than "linking." Although defendant argues that this relationship must be "unambiguous and defined" in order to "facilitate the principal goal of the '321 patent," I will not read such a limitation into the disputed claims. See also Webster's Ninth New College Dictionary 110 (1983) (defining "associate" as "to bring together or into relationship in any various and tangible ways"). Accordingly, "associating the DR and the referenced record" in claims 47, 185, 190 and 193 of the '321 patent creates a relationship that is broader than linking.

10. Modify block ('505 patent, claims 15 and 19)

Plaintiffs define "modify block" as "a text block to be modified, e.g., a contiguous portion of text that can be selected by word processor commands to be deleted, moved or copied." Defendant disputes plaintiffs' proposed definition insofar as plaintiffs have articulated only an example of the definition (by plaintiffs' use of "e.g.") rather than the definition. I agree. Accordingly, "modify block" in claims 15 and 19 of the '505 patent means a contiguous portion of text that can be selected by word processor commands to be deleted, moved or copied.

11. Hyperlink phrase ('505 patent, claims 15 and 19)

Defendant defines "hyperlink phrase" as equivalent to "keyword phrase" while plaintiffs define it as "an object name or phrase in text that may be highlighted." At the claim construction hearing, plaintiffs distinguished between "hyperlink phrase" and "keyword phrase" by arguing that a "keyword phrase" is a recognized text string *before* it is converted to a hyperlink phrase and a "hyperlink phrase" is a keyword phrase *after* it has been converted to hyperlink. However, plaintiffs concede that a keyword phrase is recognized in real time (in the context of defining the term "hypertext linking reference") and I have construed the claims to require that "hypertext linking reference" (the address) must also be established in real time. Therefore, in light of plaintiffs' concession and this court's construction, there is no meaningful distinction between "hyperlink phrase" and "keyword phrase." The conversion from a keyword phrase to a hyperlink occurs in real time, that is, as soon as the last word of the keyword phrase has been entered. Even a cursory reading of the '505 patent specification reinforces this construction. See '505 Patent, 3:5-13 ("A hyperlink phrase is related to a specific hyperlink site by an associated hyperlink address and usually is descriptive of the related site. . . . By selecting a specific hyperlink phrase, a user selects an associated hyperlink site and automatically displays the object stored at the selected site."). Accordingly, "hyperlink phrase" in claims 15 and 19 of the '505 patent is equivalent to "keyword phrase," which is a recognized text string that serves as the hypertext

link.

12. Limiting text block modification ('505 patent, claims 15 and 19)

The parties dispute whether "limiting text block modification" occurs whenever a hyperlink phrase would be affected by a *modification* (plaintiffs' position) or whenever a hyperlink phrase would be affected by a *conventional editing routine* (defendant's position). Although it is not easy to discern the difference between a modification as opposed to a conventional editing routine, the difficulty will have no effect on the construction. In response to a rejection regarding "limiting text block modification," the patent examiner explained that the inventor "decided to define the term 'limiting' [text block modification] to include all specific instances of modified (i.e. non-conventional) editing routines whenever at least one hyperlink phrase was to be affected by a record modification." See Aff. of Craig Smith, Exh. Q, May 30, 2000 Amendment, at 5. Moreover, the patent examiner summarized the inventor's position by stating that "[t]he concept is to modify the conventional editing routine whenever one or more hyperlink phrases would be affected by a record modification." Id. Therefore, the prosecution history supports defendant's proposed construction. See Warner-Jenkinson, 520 U.S. at 30 (prosecution history is relevant if particular interpretation of claim was considered and specifically disclaimed during prosecution of patent); Vitronics, 90 F.3d at 1582-83. Accordingly, "limiting text

18

block modification" in claims 15 and 19 of the '505 patent occurs whenever a hyperlink phrase would be affected by a conventional editing routine.

ORDER

IT IS ORDERED that the motion by plaintiffs Hyperphrase Technologies, LLC and Hyperphrase Inc. to voluntarily dismiss with prejudice all claims relating to the U.S. Patent No. 6,308,171 is GRANTED.

Further, IT IS ORDERED that the claims of plaintiffs' U.S. Patent No. 5,895,461, No. 6,272,505 and No. 6,516,321 are construed as follows:

1. "Record" and "data record" as used in claims 49 and 53 of the '461 patent means components of a database composed of fields arranged in a particular predefined structure;

2. "Hyperlink" in claim 49 of the '461 patent and claims 15 and 19 of the '505 patent means a keyword phrase, an address and information stored at that address;

3. "Link" and "linking" in claim 83 of the '321 patent means creating a hypertext link or address association;

4. "Keyword phrase" means a recognized text string that serves as the hypertext link;

5. "Hypertext linking reference" in claims 49 and 53 of the '461 patent means the address associated with the keyword phrase;

6. In claims 49 and 53 of the '461 patent, "keyword phrase" and its "hypertext

linking reference" must both be recognized in real time, that is, as soon as the last word of the keyword phrase has been entered;

7. "When a DR is identified, associating the DR and the referenced record" occurs in real time in the '321 patent;

8. "Identifying the reference record" in claims 1 and 83 of the '321 patent means "locating or finding the record";

9. "Associating the DR and the referenced record" in claims 47, 185, 190 and 193 of the '321 patent creates a relationship that is broader than "linking";

10. "Modify block" in claims 15 and 19 of the '505 patent means a contiguous portion of text that can be selected by word processor commands to be deleted, moved or copied;

11. "Hyperlink phrase" in claims 15 and 19 of the '505 patent is equivalent to "keyword phrase," which is a recognized text string that serves as the hypertext link; and

12. "Limiting text block modification" in claims 15 and 19 of the '505 patent occurs whenever a hyperlink phrase would be affected by a conventional editing routine.

Entered this 18th day of June, 2003.

BY THE COURT:

BARBARA B. CRABB
District Judge