IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

ALCATEL-LUCENT USA, INC.	§	
	§	
Plaintiff,	§	
	§	
vs.	§	**CASE NO. 6:09-CV-422**
	§	**PATENT CASE**
AMAZON.COM., INC., et al	§	
	§	
Defendants.	§	

MEMORANDUM OPINION

Alcatel-Lucent USA Inc. ("ALU") asserts U.S. Patent Nos. 5,649,131, 5,623,656, and 5,404,507 against Defendants. Defendant Amazon.com, Inc. has counterclaimed that ALU infringes its U.S. Patent Nos. 6,049,524 and 6,490,246. All five patents are now before the Court for claim construction.

APPLICABLE LAW

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). In claim construction, courts examine the patent's intrinsic evidence to define the patented invention's scope. *See id.*; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). This intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d

at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id*. Other asserted or unasserted claims can also aid in determining the claim's meaning because claim terms are typically used consistently throughout the patent. *Id*. Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id*. Also, the specification may resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular

embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent.").

Although extrinsic evidence can be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition is entirely unhelpful to a court. *Id*. Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*.

ALU's PATENTS

The '131 Patent

The '131 patent is directed to a communications protocol that facilitates the exchange of interface information between a host processor and a terminal, such as a work station, smart phone, or portable computer. The invention allows a host processor to specify relative rather than specific

attributes for an object to be displayed on a terminal display, leaving it up to the terminal to display the object according to the terminal's capabilities. Abstract. The '131 patent has been previously litigated twice. The two disputed terms here were previously construed in both of those cases.

Transmitting . . . to said device

ALU contends this term should be construed as "transmitting information directly to the device without retransmission of the information by an intermediate processor, which actively manages the terminal device." Defendants contend the term should be construed simply as "transmitting information directly to the device without retransmission of the information by an intermediate processor." Thus, Defendants contend that the information cannot be retransmitted by an intermediate processor (i.e., through a network), while ALU contends that the information can be retransmitted through an intermediate processor (i.e., through a network), so long as that intermediate processor does not actively manage the terminal device.

This term has previously been construed first in *Lucent Technologies, Inc. v. Gateway, Inc.*, Case No. 02-2060-B (CAB) (S.D. Cal. June 25, 2008, on remand) (Brewster, J.) ("*Gateway*") and then again in *Foundry Networks, Inc. v. Lucent Technologies, Inc.*, Case No. 2:04-cv-40 (TJW) (E.D. Tex. May 25, 2005) (Ward, J.) ("*Foundry*"). Judge Brewster construed the term in *Gateway* as "transmitting information directly to the device without first transmitting it to a site processor which then retransmits it." After considering Judge Brewster's construction, Judge Ward construed the term in *Foundry* as "transmitting information directly to the device without retransmission of the information by an intermediate processor." Defendants here propose that the Court adopt Judge Ward's construction.

ALU contends Defendants' construction reads out a preferred embodiment, which requires

intermediate switches or routers over the telephone network that were not responsible for actively managing the terminal devices. However, the bulk of the parties' arguments and support for their positions centers around the examiner's rejection of the claims over Lewis and the patentees' response, but neither side accurately characterizes the exchange between the examiner and patentees.

The Lewis patent describes a remote education system, which includes a host site 12 and a remote site 14. A studio for an instructor is located at host site 12, which includes a host computer 36. Remote site 14 contains several student terminals 52, which are daisy chained together and connected to a site controller 50. A data link connects site controller 50 and host computer 36. During prosecution of the '131 patent, the applicant described Lewis as first downloading information to site controller 50 before the information is transmitted to the student terminals 52. The applicant argued his invention was patentable over Lewis:

> Thus, in Lewis display information is first transmitted from the host to site processor, which then retransmits the display information to the terminal devices. The claimed invention is DIFFERENT. Specifically, in the claimed invention, the host communicated display information directly to a terminal, as is particularly set forth in claims 5 and 6 at lines 6–7. Thus, the claimed invention is unlike the apparatus described in Lewis.

See Prosecution History, attached as Ex. 5 to Defendants' Brief at 4. Thus, the applicant distinguished Lewis by arguing that in the applicant's invention the information sent to a terminal is not first downloaded to an intermediate processor before being provided to the terminal.

The prosecution history does not support ALU's proposed "clarifying" construction. Further, ALU's proposed phrase "which actively manages the terminal device" is ambiguous. Finally, the specification does not teach that site controller 50 actively manages the operation, including information display, of terminals 52. A person of ordinary skill in the art would understand from

the specification that site controller 50 merely outputs information to be displayed on a terminal 52 and would understand that each terminal 52 actively manages its own display of information according to a display format designed into the terminal.

Defendants' focus on "direct" transmission as opposed to "retransmission" is misplaced since the applicant distinguished Lewis because Lewis first downloaded—i.e., saved—information that was to be displayed on a terminal before transmitting it to a terminal.

Accordingly, the Court construes the term as "transmitting information directly to the device without first downloading the information to an intermediate processor (i.e., saving to memory of the intermediate processor for subsequent retrieval)." The Court notes that buffering is a distinct process from downloading. The claims and the Court's construction do not prohibit short pauses in the transmission of information due to buffering.

identifier

ALU contends an "identifier" is a "label assigned to identify." Defendants contend it should be construed as "a unique label assigned to identify each one of a plurality of input object types and, if any, each one of a plurality of group identifiers" as it was in the two previous cases.

In the pre-hearing briefing, ALU contends its construction is simpler and less cumbersome than the previous constructions and is consistent with the plain and ordinary meaning. ALU also contends that Defendants' proposed construction imports a limitation from claim 1 into claims 3 and 5 since those claims do not include "input object types." Finally, ALU argues that the claims are broad enough to cover individual or group identifiers and it is unclear in Defendants' construction whether the "unique label" also applies to group identifiers, which the specification does not require to be unique. *See* '131 patent at 4:13–16, 13:22-26, 14:59–62.

In their pre-hearing briefing, Defendants contend their proposed construction is consistent with the plain and ordinary meaning of the term when read in light of the specification. Defendants further contend that the specification requires both individual and group identifiers to be unique. *See* '131 patent at 3:60–64 and 4:10–16. Finally, Defendants argue that ALU's arguments that its construction is simpler and less cumbersome was rejected by the *Gateway* and *Foundry* courts.

At the hearing, the parties agreed that "identifier" should be construed as a "a unique label assigned to identify." Tr. 32:6–9. The Court adopts this construction. Although the parties agreed to this construction at the hearing, they both submitted a post-hearing statement on the construction. ALU raised concerns with respect to "group" identifiers. This concern was addressed at the hearing, and the parties reached a mutual understanding. Defendants withdrew their agreement to the Court's proposed construction and proposed that "identifier" should be construed as "a unique label that serves to distinctly identify each one of a plurality of input object types, and if any, each one of a plurality of group identifier types."

The Court holds Defendants to their agreement as stated at the hearing. The Court asked both sides if they agreed to the construction, and both sides responded affirmatively. Having reached an agreement on the term's meaning, the Court moved on and discussion on that term ended. Had Defendants not agreed to the term's meaning, further discussion and argument on the term would have occurred. However, relying on the parties' agreement, the Court turned to the next term. Accordingly, the Court finds that Defendants waived their rights to object to the proposed construction.

The '656 Patent

The '656 patent is directed to "pre-processing script-based data communications in a manner

that embeds information regarding the previous state of the system within that script data. This effectively imposes a state memory upon what would otherwise be a stateless system." '656 patent at 1:66–2:4.

script

ALU contends a "script" is "a series of commands that can be interpreted by a computer in order to accomplish a particular task." Defendants contend a "script" is "a series of commands that are interpreted by a program in order to accomplish a particular task." Thus, the parties dispute whether the commands can be interpreted by a computer (ALU) or are interpreted by a program (Defendants).

ALU contends that "program" could be construed as a limitation denoting execution by software alone, rather than hardware, such as a code hard-wired directly onto a computer chip. ALU's construction allows the commands to be interpreted by either software or hardware. ALU contends this is consistent with the specification. *See* '656 patent at 3:7–8, 4:26–32.

The Court adopts Defendants' construction. The ordinary and customary meaning of "script" is a software element written in interpretative language, as opposed to being compiled into machine-readable code. Interpretive languages must be interpreted by software for any processing to occur. Since interpretative languages are not compiled, they can only be indirectly executed by a computer. Here, the '656 patent describes the server's script interpreter program as the "script preprocessor," a program that recognizes and processes HTML scripts, parsing through and operating on the HTML commands. *See* '656 patent at 3:2–4. Thus, the specification uses "script" consistently as how one of ordinary skill would understand the term, i.e., as being interpreted by another program.

script preprocessor

ALU contends the "script preprocessor" is a "computer agent that processes scripts as a function of action parameters and embedded variables received from a client computer (processing, for example, through text insertion, conditional text insertion, database record access, and/or conditional script redirection)." Defendants contend it is "a program to change received data from a client computer into a format that can be processed by a server, to recognize particular script files specified by an action parameter, and to process those script files as a function of the received data and pre-programmed instructions."

ALU argues that claim 8 explains that a script preprocessor retrieves and modifies certain data, as a function of action parameters and embedded variables, and then transmits the modified data between the data server and the client node. Similar to its position on "script," ALU argues that a script preprocessor can be hardware or software.

Defendants contend that in the '656 patent, the script preprocessor is a program—not hardware—used to change FIF (Fill in Form) data received from the client computer and to interpret HTML script files. *See* '656 patent at 1:45–53, 3:2–8. Defendants further argue that one skilled in the art would understand the script preprocessor to be a program to process received data into a format that can be executed by a server.

At the claim construction hearing, the Court recognized that the parties' primary disagreement is whether a script preprocessor is a "computer agent" (ALU) or "a program" (Defendants). Setting aside this issue, at the hearing the Court proposed "[either a computer agent or a program] that processes an input script to produce an output script that is used as an input to another program." In their post-hearing submission, Defendants consented to this construction, but

ALU did not. After further consideration, aside from the parties' dispute of whether a script preprocessor is limited to a program, claim 8 otherwise sufficiently limits the term. Claim 8 describes the script preprocessor as:

> configured to retrieve data representing particular script files from said script file memory and modify said retrieved data in response to variables contained in script-based data received from one or more client nodes and data contained in said database; and transmit said modified retrieved data between said data server and said one or more client nodes, thereby providing said one or more client nodes with information reflective of the previous state of said script-based communication system.

Further construction would only confuse the term, and the parties have not identified any specific claim scope disagreement apart from the issue of whether the script preprocessor can be hardware and/or software or must be a program.

The specification consistently teaches that a script preprocessor is limited to a program. Figure 1 shows the script preprocessor is installed on data server 102, which is hardware. The specification describes that the script preprocessor uses FIF date to define the state of the next script that will be passed to client terminal 101. '656 patent, 2:56–60. Although not expressly stated, the server must be executing a software program for the data to be used and the state of a script (which is also software) to be established. Additionally, the specification describes the script preprocessor as programmed to recognize the particular HTML-D script specified by the action parameter from client computer 101. '656 patent, 3:2–5. This can only happen by operation of a software program. ALU argues that since the script preprocessor is "programmed" it cannot be limited to a program. However, one skilled in the art would understand a preprocessor to be a software program and would read "programmed" to mean that the script preprocessor contains a set of instructions to perform the operation of recognizing the specified HTML script. Finally, the specification describes the script

preprocessor as performing various processing operations, which are software program operations. *See* '656 patent, 3:14–17. Accordingly, the Court construes this term as "a program."

script file

ALU contends that since the Court is construing "script," "script file" does not require construction. Alternatively, ALU argues a "script file" is a "file containing a script (a script is a series of commands that can be interpreted by a computer in order to accomplish a particular task)." Defendants contend a "script file" is "a text-based file containing a script (a script is a series of commands that are interpreted by a program in order to accomplish a particular task)." Thus, the parties dispute whether the script file must be "text-based."

ALU argues that the specification describes the invention as including "systems where the data collected from clients includes information other than alphanumeric characters (such as graphics or other digital data)." *See* '656 patent at 4:17–19. Defendants contend that the script files disclosed in the '656 patent "represent a finite set of text-based HTML FIF scripts that contain fields which are defined as a function of the filled-in field data transmitted from client computer 101." *See* '656 patent at 2:64–3:2. Defendants contend that ALU is attempting to broaden the claims because although the specification does make a single reference to non text-based data it describes no examples of such alternative embodiments and does not teach how such alternative embodiments could be accomplished.

Having construed script, this term does not require construction. Defendants' "text-based file" limitation is overly limiting, and their language "that is similar in structure and format to an ordinary HTML document" is ambiguous. The patent does not disclaim non text-based files, and limiting the claims to the preferred embodiment would be improper. Additionally, dependent claim

9 further limits scripts to HTML-based scripts. Accordingly, the Court does not adopt Defendants' proposed limitations, and this term does not require construction.

modifying said retrieved data as a function of said variables/modified retrieved data

ALU contends "modifying said retrieved data as a function of said variables" should be construed as "changing the retrieved script data in response to the embedded variables." Defendants contend the term should be construed as "processing performed by script preprocessor to change the script file(s) based on the values of the embedded variables." ALU contends that "modified retrieved data" does not require construction or alternatively should be construed as "the result of changing the retrieved script data in response to the embedded variables." Defendants contend "modified retrieved data" is "the content of one or more script files modified by a script preprocessor." The parties' primary dispute is whether the modifying must be done by the script preprocessor, as Defendants' construction requires.

ALU argues that, unlike claims 6 and 8, claims 1 and 3 do not reference a script preprocessor and Defendants' construction improperly imports a script preprocessor into these claims. ALU further argues that neither the specification nor the prosecution history require the modifying actions be done by the script preprocessor. ALU contends the inventive novelty is in the creation of a system that embeds information regarding the previous system state within communications so that a state memory is effectively imposed on otherwise stateless communications, not in modifying data by a script preprocessor. Defendants contend that the alleged inventive novelty is in the script preprocessor and its function of preprocessing script-based data to embed information regarding the previous state within the script data. Moreover, Defendants contend that operations performed on the scripts must be done by the script preprocessor. Thus, modifying the script data must be done

by the script preprocessor.

The Court construes "modifying said retrieved data as a function of said variables" as "changing the retrieved script data in response to the embedded variables" and "modified retrieved data" as "the results thereof." Claims 1–5 are method claims, while claims 6–8 are system claims. Only system claim 9 expressly requires a script preprocessor. While the specification describes that data modification is processing performed by the script preprocessor, the method claims do not limit how the data modification is performed. Further, the specification does not disclaim processing by something other than the script preprocessor. Accordingly, the Court does not import a script preprocessor limitation into the method claims. The Court adopts ALU's constructions.

The '507 Patent

The '507 patent describes an apparatus and method for searching for records of database items with incomplete or incorrectly provided input data. The query uses search expressions that include terms and phrases that are equivalent to each of the input words and include expanded acronyms and abbreviations. The search expressions may also include words that are close to an input word when it appears to be misspelled.

retrieving . . . in response to an input string of target words

This term appears in the preambles of claims 1 and 10. Both sides agree the preambles are limiting and should be construed. ALU contends the term means "automatically gathering through a database interrogation system in response to an input string of target words without additional human interaction." Defendants contend the term should be construed as "inputting a string of target words and responding to the user by retrieving only a single record." The parties' primary disputes are whether the methods retrieve only a single record and whether the methods require an automated

database interrogation system.

A single record

ALU contends limiting the preambles to a single record is inconsistent with the claim language and specification. Specifically, ALU contends that claims 1 and 10 refer to "retrieving records" and because the claims are "comprising" claims "a" record is not limited to a single record. ALU further argues the specification repeatedly indicates that the system and method can be used to retrieve multiple records. *See* '507 patent at 1:46–47; 2:5–6; 7:14; 7:25–26; 8:8–10; 8:32. Defendants contend that the essence of the invention is to return only a single record. The final element of claims 1 and 10 refer to "a retrieved one of the records that best matches the input string of target words." Defendants further contend the specification supports this understanding. *See* '507 patent at Step 311 in Fig. 3; 2:25–29; 7:15–20; 7:18–20. Finally, Defendants argue the applicant's response during prosecution to the disallowance over Barbic clearly disavowed returning more than one result to the user.

Although this term is used in the preamble, Defendants rely on the final element of claims 1 and 10 to support their construction. *See* Defendants' Responsive *Markman* Brief, Docket No. 243 at 15. This exemplifies a fundamental misunderstanding by both parties about what is claimed, likely because the word "retrieving" is used differently in the preamble and in the method step. Claim 1 claims:

> 1. A method of retrieving a record for an item in an information database in response to an input string of target worlds, the method comprising the steps of:
> comparing each word contained in the input string target words with words contained in a search expression database associated with the information database;
> generating a set of search expressions for each one of multiple ordered queries, each search expression including words from the search expression database for providing an equivalent representation of one or more of the input string of

target words;

retrieving records from the information database, each record retrieved in each of the multiple ordered queries containing the set of search expressions respectively generated for one of the multiple ordered queries being arranged in order of a most restrictive query to a least restrictive query; and

selecting in accordance with a predetermined parameter a retrieved one of the records that best matches the input string of target words.

The preamble informs the reader that the claim is directed to a method of retrieving a record for an item. ALU's argument that since "comprising" is used the method can ultimately result in multiple records being returned is off point. The method is "comprising" steps; thus additional steps may be performed, but this does not mean that the method can result in additional records being ultimately retrieved.

The claim uses "retrieving" in both the preamble and as the action of step 3. However, as used in the preamble, "retrieving" summarizes the entire method; it is not synonymous with "retrieving" in step 3. The first claimed step is to compare the target words with words in a search expression database. The next step is to generate search expressions based on the target words. The third step is to "retriev[e]" records (plural) from the information database. The final step is to select one of the retrieved records. Thus, while the retrieving step, step 3, involves retrieving multiple records, the final result of performing the method steps is a single record. This is reflected in the preamble: "a method of retrieving a record." In the preamble, "retrieving a record. . . in response to an input string of target words" is consistent with the lay meaning of retrieving only a single record.

Automatically

ALU argues the heart of the invention is an automated system that does not require a manual process performed by a human and that the Applicant distinguished his invention from Barbic on this

basis. As to the automated database interrogation system issue, Defendants contend that the method claims have no express reference to computers, machines, or devices and contain no restrictions as to who or what performs the claimed steps.

ALU's reliance on the prosecution history for its proposed construction is misplaced. In distinguishing Barbic, the Applicant stated his "*database interrogation system* only requires that a user input a string of target words at the outset of the search" (emphasis added). The distinction over Barbic that the Applicant argued was in regard to an automated system, which was covered by a "system" claim that issued as claim 23, and not as to method claims 1 or 10. Neither the specification nor the claim language limits how the method steps are performed. Accordingly, ALU's proposed "automatic[]" limitation is improper.

ALU's proposed construction is improper, and Defendants' proposed construction merely restates the claim language. The claim language will be clear to a lay jury as written. Accordingly, this term does not require construction.

search expression

ALU contends "search expression" should be construed as "one or more of the original input target words and alternative representations for the same (For example ('input word' OR 'synonym' OR 'other equivalent word'))." Defendants contend it means "the target word and one or more terms or phrases that mean the same thing as the target word, each connected by OR."

ALU contends that its use of "one or more" means that the target word(s) could consist of a single word or multi-word phrase. ALU argues Defendants' proposed construction incorrectly requires the alternative words to be connected by "OR" and does not allow for other programming ways to make the alternative connection. ALU also argues Defendants' proposed construction limits

the alternative words to only those that "mean the same thing" and thus does not account for misspelled words.

Defendants contend that claims 1 and 10, the specification, and the abstract require the search expression to be more than one word. *See* '507 patent at 1:64–2:2; 5:60–65; 5:1–6. Defendants further contend that the specification only describes joining terms by "OR" and ALU's construction would introduce ambiguity by permitting other operators. Finally, Defendants contend that the words in a search expression must mean the same thing as a target word. *See* '507 patent at claim 1, 1:60–2:29.

This term does not require construction. The claim language itself defines "search expression": "each search expression including words from the search expression database for providing an equivalent representation of one or more of the input string of target words." This adequately defines the term. Notably, and contrary to both parties' proposed constructions, the claim language does not require that the search expression include an original target word. Additionally, the parties' constructions propose different meanings for "equivalent" but "equivalent" is not defined in the specification. "Equivalent" is a lay term that a jury will readily understand. Whether a search term is "equivalent" to a target word is a fact question. Finally, although the specification describes the search terms as joined by "OR," one of skill in the art would not understand the claim to require use of an "OR" connector. This term does not require construction.

search expression database

ALU contends "search expression database" does not require further construction but alternatively proposes "electronic collection of alternatives for target words." Defendants contend it is a "database containing search expressions."

ALU contends Defendants' construction fails to explain what a database is. ALU further contends that its construction is consistent with the plain and ordinary meaning, "a collection of electronic (or computerized) data" and is supported by the specification. *See* '507 patent at 3:17–20.

Defendants contend the patentee acted as his own lexicographer with respect to this term. *See* '507 patent at 5:1–6. Defendants also contend the database does not need to be electronic.

This term also does not require construction as the claim language is sufficiently clear. ALU's proposed construction requires that the database be electronic. However, as previously discussed in the "retrieving" limitation, the method claims do not limit themselves as to how they are performed.

selecting in accordance with a predetermined parameter a retrieved one of the records that best matches the input string of target words

ALU contends this term means "finding based on a strategy determined in advance a record that best matches the input string of target words." Defendants contend it means "returning to the user only a single record, that record having a closeness value, based on the input string of target words, that satisfies a preset cutoff value." At the hearing, Defendants proposed a new construction: "retrieving in accordance with a predetermined parameter a single record that best matches the input string of target words."

ALU argues Defendants' construction incorrectly requires that the selected record must be returned to the user and only allows one record to be returned. ALU contends that "selecting" the record(s) is not the same as returning them to the user. The selecting step is performed by the computer based on a strategy or algorithm before any records are returned to the user. Moreover, the claim language requires "selection" not the subsequent transmission to the user. Further, ALU

argues that although the claim language requires "one of the records" that best matches the input words to be selected, it does not preclude more than one record from being evaluated or returned. Further still, the specification indicates it is possible for multiple records or candidate results to be reported to the user. *See* '507 patent at 7:25–26; 1:46–47; 2:5–6; 7:14; 8:8–10; 8:32.

Defendants contend that the plain language of claims 1 and 10 limits the retrieved records to a single record, as they argued with respect to "retrieving . . . in response to an input string of target words." Defendants also contend that ALU's proposed construction erroneously only requires that the retrieved record satisfy a "strategy" rather than a predetermined parameter and gives no meaning to that word.

This term does not require construction. The parties primarily dispute whether the step involves selecting only a single record. The claim language itself specifies that only "one" record is selected. While the specification may contemplate that multiple records are reported to the user, in these claims the patentee claimed selecting one of the retrieved records. Defendants' original proposed construction adds additional limitations that are not required by the claim language, including returning the record to the user. ALU's proposed construction improperly broadens the claim limitation from "selecting" to "finding." Defendants' construction proposed at the hearing again limits the step to selecting a single record and then restates the claim language. Having resolved the parties' dispute that only one record is selected and the claim language being clear, this term does not require construction.

query

ALU contends a query is a "search command executed by the database interrogation system based on the input string of target words." Defendants contend a query is "a set of two or more

search expressions, each connected by AND."

ALU argues its proposed construction is supported by the specification. *See* '507 patent at 1:50–57; 6:18–22; 8:37–46; 8:61–67; 9:23–40; Fig. 3. ALU contends Defendants' proposed construction improperly requires that each search term be connected by "AND" and not an equivalent conjunctive connector and that each query must contain two or more search expressions. ALU argues that claim 1 includes the phrases "multiple ordered queries," "most restrictive query," and "least restrictive query" and that the construction of "query" must apply to each usage. ALU contends that Defendants' requirement that each query contain two or more search expressions is contrary to one purpose of the invention.

Defendants contend the claims, Abstract, and prosecution history require that a query be composed of more than one search expression. *See* '507 patent at claims 1, 23; abstract. Defendants also contend that "AND" is an appropriate limitation because the patentee illustrated numerous queries in the patent, and they all use the "AND"—and not some other—connector. Finally, Defendants contend that nothing in the structure of the queries requires a "database interrogation system." Although the claims require records to be retrieved, they are silent on how this is accomplished.

The Court construes this term as "search command executed based on the input string of target words." Similar to "search expression," a query does not require use of "AND." A query may consist of a single search expression. The parties' primary dispute is whether a set of search expressions may contain only a single search expression. A set can be comprised of one search expression, and one of skill in the art would not read the claim language to require multiple search expressions. A least restrictive query could contain a singular search expression. ALU is correct

that a query is a search command, but the remainder of its construction lacks support in the claim language or specification. Accordingly, the Court construes the term as "search command executed based on the input string of target words."

each record containing the words included in each of the search expressions

ALU contends this phrase means "each record containing the word(s) required to be found (i.e. at least one alternative term) by each of the search expressions included in the plurality of search expressions." Defendants propose "only those records that include all of the words in all of the search expressions."

ALU contends that only one of the alternative terms in a particular search expression is required to be found in a record in order to be included in the obtained results. *See* '507 patent at 5:6–8. ALU argues that Defendants misread the prosecution history to require that all words in the search expression, including each alternative word, be found in each record.

Defendants argue that the plain meaning of the claim requires that each record must contain every word in each of the search expressions. Defendants contend this is how the examiner interpreted the claim during prosecution and the applicant affirmed that interpretation.

The Court construes this term as "a retrieved record includes at least one of the words present in each individual search expression within the plurality of search expressions." During prosecution, the examiner initially believed the claim language required that a retrieved record must include all words in all search expressions. However, the specification does not support this interpretation. Moreover, the applicant's remarks to the examiner do not support this interpretation. The patentee's remarks were in the context of discussing the set of search expressions and not the individual words of the search expression as Defendants contend. Thus, the applicant responded to the examiner that

the claim language required a retrieved record include at least one word from each search expression. *See* Prosecution History, attached as Exs. 14-15 to Defendants' Brief. Further, the specification discloses that the words within a search expression are joined by "OR." Use of a disjunctive such as "OR" means that not every word in a search expression must be found in a retrieved record. Accordingly, the Court clarifies ALU's proposed construction and construes the term as "a retrieved record includes at least one of the words present in each individual search expression within the plurality of search expressions."

AMAZON'S PATENTS

Amazon asserts its '524 and '246 patents against ALU. The '246 patent is a continuation of the '524 patent; thus the patents have identical disclosures. The patents are directed to a mutliplex router device that sends packets to network terminal destinations according to a routing protocol. The protocol includes creating a routing table of destination addresses. The disclosed router has a portion for forwarding data packets and a portion for creating a routing table, or route calculation table.

The specification discloses two embodiments. In one embodiment, a router has a plurality of integral route calculation units. One unit is to be placed in an active mode, and another unit is to be placed in a standby mode. The router can switch between units to make a standby unit become active. Thus, a "multiplex" router has redundant route calculation units: one active and one standby. This embodiment is diagramed in Figure 1. '524 patent at 7:29–52.

A second embodiment is diagramed in Figure 15. In this embodiment, a multiplex router is formed by connecting a plurality of routers 10, where each router 10 includes a single route calculation unit 11. The routers 10 are connected through forwarding units 13 and networks or other

transmission paths. '524 patent at 12:17–24. The functional operation of both embodiments is similar.

multiplex router device

This term is used in the '524 patent. Amazon contends the term does not require construction. ALU contends the term means "a single router device that includes multiple, stand-alone route calculation units."

Amazon contends the term is easily understood by one of skill in the art and is clearly defined by the claims themselves. Amazon argues ALU's proposed construction is inconsistent with the claim language and the specification.

ALU argues this term has no plain and ordinary meaning to one of skill in the art but is defined in the specification as "[t]he router with two route calculation units 11a, 11b in a multiplex configuration is hereunder referred to as the 'multiplex router device' for convenience in differentiating it from other routers." '524 patent at 5:40–43. ALU contends "multiplex router device" and "multiplex router" have different meanings in the patents. A "multiplex router device" is a single "router device" with multiple route calculation units as shown in Figures 1 and 2. In contrast, a "multiplex router" is broader than a "multiplex router device" and may include a plurality of routers—one active and one on standby—acting as a single router.

This term does not require construction. ALU's proposed construction, which restricts a multiplex router device to a single device, is overly limiting and improper. The parties dispute whether the term is limited to an integrated apparatus with multiple route calculation units as shown in Figure 1. The patentee acted as his own lexicographer and defined "multiplex router" as a router with redundant route calculation units as shown in either Figure 1 or 15. Contrary to ALU's

contention, the specification uses "multiplex router" and multiplex router device" interchangeably. While the background description supports ALU's construction, as a whole the specification supports a broader construction. For example, ALU's construction would improperly exclude one of the preferred embodiments as "multiplex router" is used in relation to both Figure 1 and 15. Additionally, dependent claim 4 requires that the route calculation units are spread across a plurality of router devices, undermining ALU's position. Finally, the claim preamble makes clear that "multiplex" refers to multiple, redundant route calculation units. Accordingly, ALU's construction is overly limiting.

As the Court has resolved the parties' dispute as to whether "device" restricts the claim scope to a single apparatus embodying multiple route calculation units and there is no dispute as to what a router is and does, this term does not require construction.

plurality of routers

This term is used in the '246 patent. Amazon contends the term means "two or more processing units with the ability to route electronic information in a computer network." ALU contends it means "multiple router devices, each device having a single corresponding route calculation unit therein."

Amazon contends its construction is useful because it helps explain what a router does. Amazon further contends its construction is consistent with the patents' description of routers. Amazon argues ALU's construction is contradicted by the specifications.

ALU contends its construction is supported by both the specification and the prosecution history. ALU contends that during prosecution of the '246 patent the applicants distinguished the '526 patent's claims on the ground that the '246 patent requires redundancy between "two different

routers." ALU argues that Amazon's proposed phrase "processing units" has no clear meaning. Further, ALU argues that Amazon's proposed construction cannot be reconciled with the requirement that each router is provided with the same router ID in advance. Finally, ALU contends Amazon's construction ignores that all of the asserted claims require that the plurality of routers "are mutually connected via a network."

The Court adopts ALU's construction and construes the term as "multiple router devices, each device having a single corresponding route calculation unit therein." Amazon's proposed construction is fatally flawed. The term "processing units" in Amazon's proposed construction is ambiguous. In contrast, "routers" is easily understood by one of skill in the art. ALU's proposed construction is consistent with the claim language, which specifies that "each" router has "a route calculation unit." Although "a" usually means "one or more," the claims specify separate "active" and "standby" routers. This limits "each" router to having a "single" route calculation unit. Accordingly, the Court adopts ALU's proposed construction.

CONCLUSION

For the foregoing reasons, the Court interprets the claim language in this case in the manner set forth above. For ease of reference, the Court's claim interpretations are set forth in Appendix A.

So ORDERED and SIGNED this 7th day of June, 2011.

JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

THE '131 PATENT

Term	Court's Construction
identifier (claims 1, 2, 3, 5)	a unique label assigned to identify
transmitting … to said device (claims 1, 2, 3, 5)	transmitting information directly to the device without first downloading the information to an intermediate processor (i.e., saving to memory of the intermediate processor for subsequent retrieval)
terminal device	computing device such as a data terminal, workstation, portable computer, or smart phone that enables a user to communicate with a host processor. It manages the actual positioning of objects on its associated display itself and manages its internal memory with the assistance of the host processor.
host processor	computer that communicates with one or more users to provide services such as transaction processing or database access
input object type(s)	kind(s) of displayable graphical symbol that is suitable for display on a user's terminal device and that generates particular input when touched, or manipulated, by a user
choice	an input object type that may be selected by a user when displayed
entry	an input object type that solicits information from a user when displayed
text	an input object type that provides textual information to a user when displayed
image	an input object type that displays a graphic image
manipulation	the function of supplying information requested on an object transmitted to a terminal. Manipulation can be performed in a number of different ways, such as by touching the screen or "clicking" on an object or by operating one or more entry keys, such as typing. In this element of claim 2, the manipulation function includes at least one of the available system alternatives of: (a) Selection of an object; (b) Entry of data; and (c) Retrieval of display data
presentation data type(s)	data of the type that represents a particular item to be displayed by the terminal device and that is used by the end-user in a manner that is completely independent of the terminal device. In addition, presentation data types: (i) do not contain methods or executable code; (ii) do not link to, are not embedded in, and do not embed in themselves other presentation data types; and (iii) have parameters that specify input capability, including at least an item identifier to distinguish various data items that will be displayed on a display
datum	the singular of data
default data entry value	data value entered into an object unless the user changes it
function call	the initiation of a software routine
object type(s)	The phrase "said plurality of object types" in claim 1(b) of the '131 patent refers as its antecedent basis to the phrase "plurality of input object types" recited in claim 1(a) of the patent. The "object types" at issue in claim 1 are limited to input object types.

THE '656 PATENT

Term	Court's Construction
script (claims 1, 2, 3, 8)	a series of commands that are interpreted by a program in order to accomplish a particular task
script preprocessor (claim 8)	a program
script file (claims 1, 3, 8)	no construction
modifying said retrieved data as a function of said variables/modified retrieved data (claims 1, 3, 8)	changing the retrieved script data in response to the embedded variables/ the results thereof
script-based data	script-based information
embedded variables	data whose values can change, based on what the client enters, and their associated identifiers, e.g. a name/value pair
information reflective of the previous state of a said script-based system/information reflective of the previous state of said script-based communication system	data reflecting embedded variables in the previous exchange between the client and the server

THE '507 PATENT

Term	Court's Construction
retrieving … in response to an input string of target words (claims 1, 10)	no construction
selecting in accordance with a predetermined parameter a retrieved one of the records that best matches the input string of target words (claims 1, 10)	no construction

search expression (claims 1, 2, 3, 10)	no construction
search expression database (claims 1, 2, 10)	no construction
query (claims 1, 3, 4)	search command executed based on the input string of target words
each record containing the words included in each of the search expressions (claim 10)	a retrieved record includes at least one of the words present in each individual search expression within the plurality of search expressions
art	There is a typo in claim 10. The claim contains the word "art", but the word should instead be "an". ("… generating a plurality of search expressions, … for providing art [sic: an] equivalent representation …")

THE '246 PATENT

Term	Court's Construction
plurality of routers (claims 1, 3, 7)	multiple router devices, each device having a single corresponding route calculation unit therein
route calculation unit	portion of the router device for creating a routing table
wherein said router in said active mode and said router in said standby mode are each provided with the same router identification (ID) in advance	wherein said router in said active mode and said router in said standby mode are each provided with the same router identification (ID) in advance of the failure, such that the active router and the standby router appear to have the same ID when viewed from other routers
means for receiving said network link-state information containing identifying information of the router sent from said router in said active mode	**Function:** receiving network link-state information containing identifying information of the router sent from said router in said active mode **Corresponding Structure:** data base integration module 17
monitoring means for monitoring said router in said active mode	**Function:** monitoring said router in said active mode **Corresponding Structure:** state monitor module 20
holding means for holding network link-state information containing identifying information of the router	**Function:** holding network link-state information containing identifying information of the router **Corresponding Structure**: link-state data base 22

THE '524 PATENT

Term	Court's Construction
multiplex router device (claims 1, 4, 7)	no construction
route calculation unit	portion of the router device for creating a routing table
memory means for holding routing protocol information	**Function:** holding routing protocol information when said route calculation unit thereof is in the active mode, said protocol information including

when said route calculation unit thereof is in the active mode, said protocol information including network link-state information showing connections of said multiplex router and other routers with networks, neighboring router states showing states with neighboring routers, and interface states showing states of network interfaces to connect said multiplex router device to networks	network link-state information showing connections of said multiplex router and other routers with networks, neighboring router states showing states with neighboring routers, and interface states showing states of network interfaces to connect said multiplex router device to networks **Corresponding Structure:** memory 41
process means for executing said routing protocol process, including collection of said routing protocol information held in said memory means, according to said routing protocol information held in said memory means	**Function:** executing said routing protocol process, including collection of said routing protocol information held in said memory means, according to said routing protocol information held in said memory means **Corresponding Structure**: CPU 40
notification means for sending, when said route calculation unit thereof is in the active mode, to said router calculation unit in the standby mode only the network link-state information out of the network link-state information, neighboring router states, and interface states stored in said memory means	**Function:** sending, when said route calculation unit thereof is in the active mode, to said router calculation unit in the standby mode only the network link-state information out of the network link-state information, neighboring router states, and interface states stored in said memory means **Corresponding Structure:** data base integration module 17
holding means for holding in said memory means said network link-state information sent from said route calculation unit in the active mode when said route calculation unit is in the standby mode	**Function:** holding in said memory means said network link-state information sent from said route calculation unit in the active mode when said route calculation unit is in the standby mode **Corresponding Structure:** link-state data base 22
forwarding process units	portion of the router device for forwarding packets