UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

MASTEROBJECTS, INC.,

Plaintiff,

v.

GOOGLE, INC.,

Defendant.
_____/

No. C 11-1054 PJH

CLAIM CONSTRUCTION ORDER

On January 30, 2013, the parties' claim construction hearing to construe the disputed terms of U.S. Patent Nos. 8,060,639 ("the '639 patent") and 8,112,529 ("the '529 patent) (together, the "patents-in-suit")[1] pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), came on before this court. Plaintiff MasterObjects, Inc. ("plaintiff" or "MasterObjects") appeared through its counsel, Spencer Hosie and Diane Rice. Defendant Google, Inc. ("defendant" or "Google") appeared through its counsel, Douglas Lumish, Joseph Lee, and Jeffrey Homrig. Having read the parties' papers and carefully considered their arguments and the relevant legal authority, the court hereby rules as follows.

BACKGROUND

Plaintiff is the assignee and owner of the patents-in-suit, which are directed at systems and methods for allowing a computer to predict search queries and provide search results while the user is still typing in search terms. Specifically, plaintiff describes its invention as an improvement upon previous Internet search technology, which required a

[1]MasterObjects' operative complaint also asserts a third patent, U.S. Patent No. 7,752,326, but at the claim construction hearing, MasterObjects informed the court that it intends to drop the '326 patent from the case.

user to type in an entire search query and hit "submit" before the server would start to do anything. Plaintiff claims to have developed a "new search paradigm" which has "instant search results provided, character by character, as the user type[s]." Dkt. 110 at 4. For instance, if a user is interested in searching for "Madison Square Garden," the user would start typing "m-a-d," and the server would predict the full search query based on that partial string (such as "Mad Men" after "m-a-d" was typed). As the user continued to enter the "Madison Square Garden" query (typing in "m-a-d-i"), the prediction would change. Instead of predicting "Mad Men," the server would now predict "Madison." And by the time that the user enters "m-a-d-i-s-o-n s," search results for "Madison Square Garden" would be presented to the user.

Defendant is a company that offers Internet-based services, including search technology. Plaintiff alleges that defendant's "Google Instant" product directly infringes the patents-in-suit by "providing, in response to lengthening query strings input by a user and without requiring explicit submission by that user, increasingly relevant content such as search suggestions or search results." See Third Amended Complaint (Dkt. 92), ¶¶ 35, 41.

The parties originally sought construction of eight terms (or term groups). However, at the claim construction hearing, the court indicated that it was likely to defer ruling on the two term groups that defendant argues are indefinite (namely, "increasingly focused query string" and "increasingly relevant content/increasingly appropriate content or search criteria."). As a result, the parties no longer seek construction of those terms at this stage of the case. And after the hearing, the parties were directed to meet and confer one more time, in light of the court's guidance and comments at the hearing. The parties then filed a joint statement on February 13, 2013, stating that they have agreed to construe the term "content source(s)" as "a server computer that provides the data accessed by the system." Thus, only five disputed terms or term groups are construed herein.

DISCUSSION

A. Legal Standard

In construing claims, the court must begin with an examination of the claim language itself. The terms used in the claims are generally given their "ordinary and customary meaning." See Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005); see also Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998) ("The claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim."). This ordinary and customary meaning "is the meaning that the terms would have to a person of ordinary skill in the art in question at the time of the invention...". Phillips, 415 F.3d at 1313. A patentee is presumed to have intended the ordinary meaning of a claim term in the absence of an express intent to the contrary. York Products, Inc. v. Central Tractor Farm & Family Ctr., 99 F.3d 1568, 1572 (Fed. Cir. 1996).

Generally speaking, the words in a claim are to be interpreted "in light of the intrinsic evidence of record, including the written description, the drawings, and the prosecution history, if in evidence." Teleflex, Inc. v. Ficosa North Am. Corp., 299 F.3d 1313, 1324-25 (Fed. Cir. 2002) (citations omitted); see also Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (court looks at "the ordinary meaning in the context of the written description and the prosecution history"). "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

With regard to the intrinsic evidence, the court's examination begins, first, with the claim language. See id. Specifically, "the context in which a claim is used in the asserted claim can be highly instructive." Phillips, 415 F.3d at 1314. As part of that context, the court may also consider the other patent claims, both asserted and unasserted. Id. For example, as claim terms are normally used consistently throughout a patent, the usage of a term in one claim may illuminate the meaning of the same term in other claims. Id. The

court may also consider differences between claims to guide in understanding the meaning of particular claim terms.

Second, the claims "must [also] be read in view of the specification, of which they are a part." Id. at 1315. When the specification reveals a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess, the inventor's lexicography governs. Id. at 1316. Indeed, the specification is to be viewed as the "best source" for understanding a technical term, informed as needed by the prosecution history. Id. at 1315. As the Federal Circuit stated in Phillips, the specification is "the single best guide to the meaning of a disputed term," and "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." 415 F.3d at 1321.

Limitations from the specification, such as from the preferred embodiment, cannot be read into the claims absent an express intention to do so. Teleflex, 299 F.3d at 1326 ("The claims must be read in view of the specification, but limitations from the specification are not to be read into the claims.") (citations omitted); CCS Fitness, 288 F.3d at 1366 ("a patentee need not describe in the specification every conceivable and possible future embodiment of his invention."); Altiris v. Symantec Corp., 318 F.3d 1363, 1372 (Fed. Cir. 2003) ("resort to the rest of the specification to define a claim term is only appropriate in limited circumstances"). To protect against this, the court should not consult the intrinsic evidence until after reviewing the claims in light of the ordinary meaning of the words themselves. Texas Digital, 308 F.3d at 1204-05 (to act otherwise "invites a violation of our precedent counseling against importing limitations into the claims") (citations omitted). Finally, as part of the intrinsic evidence analysis, the court "should also consider the patent's prosecution history, if it is in evidence." Phillips, 415 F.3d at 1317. The court should take into account, however, that the prosecution history "often lacks the clarity of the specification" and thus is of limited use for claim construction purposes. Id.

In most cases, claims can be resolved based on intrinsic evidence. See Vitronics, 90 F.3d at 1583. Only if an analysis of the intrinsic evidence fails to resolve any ambiguity in the

claim language may the court then rely on extrinsic evidence, such as expert and inventor testimony, dictionaries, and learned treatises. See Vitronics, 90 F.3d at 1583 ("In those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper"). However, the court generally views extrinsic evidence as less reliable than the patent and its prosecution history in determining how to read claim terms, and its consideration is within the court's sound discretion. See Phillips, 415 F.3d at 1318-19.

B. Construction of Disputed Terms and Phrases

The parties dispute construction of five different terms and term groups contained within the claims of the patents-in-suit, which are addressed in turn below.

1. "content-based cache" and "query and result cache"

The terms "content-based cache" and "query and result cache" are found in claims 1 and 13 of the '639 patent and in claims 1, 44, and 45 of the '529 patent. Plaintiff originally proposed that the terms should be construed to mean "a cache which stores previous queries and content or other information returned in response to the previous queries." Defendant originally proposed that the terms should be construed to mean "a persistent store of queries and corresponding result sets executed by a content engine, for a specific content channel, where a content engine is a third-party application that runs on a content source that is capable of performing string-based queries and returning string-formatted answers to the system, and where a content channel is a configuration on the server that defines a specific method of querying one or more specific content sources, allowing users to perform queries and retrieves corresponding results."

After the hearing, both parties revised their proposed constructions in light of the court's comments. Plaintiff now contends that the terms "content-based cache" and "query and result cache" should be construed as "a store of previous queries and corresponding result sets executed by the system." Defendant now contends that the terms should be construed to mean "a persistent store of queries and corresponding result sets executed by the system." Thus, the dispute boils down to the inclusion of the word "persistent."

For support, defendant points to the '529 patent's glossary of terms, which defines "content-based cache" as "[a] persistent store of Queries and corresponding Result Sets Executed by a Content Engine for a specific Content Channel." '529 patent, 10:17-19. Plaintiff argues that the glossary definition applies only to a preferred embodiment of the invention, and that the claims themselves are broader than that embodiment.

The court finds plaintiff's attempt to distance itself from the QuestObjects glossary definition somewhat inconsistent with its proposed construction, which hews very closely to the glossary definition. However, including the word "persistent" would likely create more ambiguity, not less, in the fact finder's understanding of the terms "content-based cache" and "query and result cache." It is for that same reason that the court is hesitant to include the terms "content channel" and "content engine" in the construction, even though they also appear in the glossary definition. Thus, the court declines to include the word "persistent," and construes the terms "content-based cache" and "query and result cache" as follows: "**a store of previous queries and corresponding result sets executed by the system**."

2. "asynchronous connection"

The term "asynchronous connection" is found in claims 1 and 13 of the '639 patent, and in claim 1 of the '529 patent. Plaintiff originally proposed that the term be construed to mean "a connection that allows one side of the communication to communicate at the same time the other side is also communicating within a session." Defendant originally proposed that the term be construed to mean "a connection that allows both the client and the server to initiate communications at any moment in time."

After the hearing, both parties revised their constructions in light of the court's comments. Plaintiff now contends that the term "asynchronous connection" should be construed to mean "a connection that allows a client and the server system to communicate at the same time within a session." Defendant now contends that the term should be construed to mean "a connection that allows both the client and the server to initiate communications at any moment in time within a session." The two proposals are close, but the key dispute appears to be whether either side of the client/server system can

actually initiate communications with each other at any time (as advocated by defendant), or whether they are merely able to communicate at any time (i.e., simultaneous, non-blocking communications, as advocated by plaintiff).

Defendant points to the specifications of both patents-in-suit for support, which state that "[t]he system is bi-directional and asynchronous, in that both the Client and Server can initiate communications at any moment in time." '639 patent, 14:25-27; '529 patent, 12:22-24. Defendant argues that "in that" is definitional language that signals the patentee's intent to define "asynchronous." Defendant also points to the specifications' examples of how communications can be initiated: "For example, a communication initiated by the Client may be a single character that is sent to the Server, that responds by returning appropriate data. An example of a communication initiated by the Server is updating the information provided to the client." '639 patent, 14:31-35; '529 patent, 12:28-32. Finally, defendant cites a portion of the file history where plaintiff represented to the patent office that "since the system is asynchronous, both the client and the server can initiate communications at any moment in time." '529 file history, 12/21/05 Applicant Remarks (Dkt. 117, Ex. E) at 12 (emphasis in original).

Plaintiff's objection to the inclusion of "initiate" stems from a concern that the patent could be improperly read to cover a scenario where the server sends unsolicited, "spam" search results to a user, even when the user has not requested any search results. At the hearing, plaintiff repeatedly brought up this "search spam" scenario, explaining that the preferred embodiment of the invention was one where a user initiates communication with a server in order to get search results, not one where the server would initiate communication with a client to send unsolicited search results. Plaintiff argues that defendant's construction would read the preferred embodiment out of the claims. The court disagrees that defendant's construction would have that effect. Rather, plaintiff's described preferred embodiment would certainly be swept into a construction that allows "both the client and the server to initiate communications at any moment in time within a session." Moreover, defendant has pointed to specific intrinsic evidence to support its position, which

plaintiff has not rebutted with intrinsic evidence of its own. Instead, plaintiff expressly acknowledges that the patent describes a scenario where a server initiates communications with a user – even though it describes this scenario as an "exception" that is merely "one detail in a potential embodiment." Dkt. 119 at 6.

Plaintiff may be correct that, in most instances, the claimed invention was intended to involve a client-initiated communication. However, it has not presented any support from the intrinsic evidence for excluding server-initiated communications from the construction of the claims. Instead, plaintiff's argument is based on concern over a potential non-infringement position that it believes defendant may pursue down the road. Those arguments are premature at this stage of the case, as the court does not construe claims with an eye towards the parties' theories of infringement (or non-infringement). Thus, the court agrees with defendant that the claimed invention covers both client-initiated and server-initiated communications, and construes the term "asynchronous connection" as follows: "**a connection that allows both the client and the server to initiate communications at any moment in time within a session**."

3. "communication protocol"

The term "communication protocol" is found in claims 1 and 13 of the '639 patent and in claims 1, 44, and 45 of the '529 patent. Plaintiff contends that the term should be construed to mean "a set of rules that enable computers to exchange messages with each other." Defendant contends that it should be construed to mean "a set of rules that enable computers to exchange messages with each other and that is optimized for sending single characters from a client to a server and lists of strings from the server to the client." Thus, the dispute is over the inclusion of the "optimized for sending characters" language tacked on to the end of defendant's proposal - the proposed constructions are otherwise identical.

Defendant points to the specification as supporting the "optimized for" language, while plaintiff argues that defendant's "support comes from one sentence in the embodiment-specific description in the '529 patent." Plaintiff further argues that the patents-in-suit describe numerous instances of sending strings of multiple characters, and

argue that there is no reason to import any "single character" limitations to claims which contain no similar limiting language. Defendant, in turn, argues that there is reason to place special emphasis on a single sentence in this case, because that sentence starts with the phrase "the invention," indicating that the patentee was referring to the invention as a whole, and not just a specific embodiment. See Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1353 (Fed. Cir. 2010) (a "reference to 'the present invention' strongly suggests" that patentee is not describing a mere embodiment); see also Honeywell Int'l, Inc. v. ITT Indus., Inc., 452 F.3d 1312, 1318 (Fed. Cir. 2006) (finding the terms "this invention" and "the present invention" to limit the claims). Defendant argues that this sentence is no different from the statements considered in Trading Techs. and Honeywell: "The invention includes a Server, that handles requests for information from clients, and a communication protocol that is optimized for sending single characters from a Client to a Server, and lists of strings from the Server to the client." '529 patent, 11:55-59.

The court agrees with defendant's general proposition that all sentences in a patent specification are not created equal, and that a disclosure that begins with "the invention" is due more weight than a disclosure without that introductory language. However, the court finds two problems with defendant's proposal here. First, defendant admits that the invention is not restricted to the sending of single characters, but merely argues that it is optimized for sending single characters. Thus, it is unclear how (if at all) defendant's construction actually serves to restrict the claim scope. Both proposals seek to construe "communication protocol" as a set of rules for exchanging messages of either a single character or multiple characters. Adding the "optimized for" language would not add anything to or take anything away from the scope of claims, and the court is hesitant to add extra verbiage to a construction when the addition would not have a practical effect on claim scope.

Second, while the court does recognize the importance of the phrase "the invention," as it is used in the specification, it also notes a small but significant difference between the '529 patent's description of "the invention," and the '639 patent's description of that same

"invention." The '639 patent states that "[t]he invention includes a Server, that handles requests for information from clients, and a communication protocol that is optimized for sending characters from a Client to a Server, and lists of strings from the Server to the client," thereby omitting the word "single" from the '529 patent's otherwise-identical statement. Compare '639 patent, 13:58-62 with '529 patent, 11:55-59. So even if the court were inclined to adopt the "optimized for" language, defendant has not provided any justification for adopting the '529 patent's version of that language (which includes the word "single") over the '639 patent's version (which does not include "single").

For both of these reasons, the court opts not to include the additional language proposed by defendant, and construes the term "communications protocol" as follows: "**a set of rules that enable computers to exchange messages with each other**."

4. "session"

The term "session" is found in claims 1 and 13 of the '639 patent and in claims 1, 44, and 45 of the '529 patent. Plaintiff originally proposed that the term be construed as "a related set of communications between a client and server as the user enters a particular search query by entering consecutive letters." Defendant originally proposed that the term be construed as "a state maintained between a client and a single server in which the server recognizes when subsequent requests originate from the same client such that, in responding to a character the server receives from a client, the server can use the history of data that has been sent to and from the current user."

After the hearing, both parties revised their constructions in light of the court's comments. Plaintiff now contends that the term "session" should be construed to mean "a related set of communications between a client and the server system as the user enters a search query by entering consecutive characters." Defendant now contends that it should be construed to mean "a [state or status or condition or relationship] maintained between a client and a single server in which the server recognizes when consecutive requests originate from the same client, and the server uses the history of requests and responses that have been sent to and from that client in responding to those consecutive requests."

Defendant relies on language from the specification to support its argument, while plaintiff argues that the cited language refers only to one embodiment of the invention, and not the invention as a whole. Specifically, defendant points to the following language, found in both patents-in-suit: "In accordance with one embodiment of the invention the system is session-based, in that the server knows or recognizes when subsequent requests originate at the same Client. Thus, in responding to a character the Server receives from a Client it can use the history of data that has been sent to and from the current user." '639 patent, 14:12-17; '529 patent, 12:9-14. Plaintiff is obviously correct that the passage refers to just "one embodiment of the invention," but that "one embodiment" (i.e., the "session-based" embodiment) covers the very claim term at issue here. The patents state that, in one embodiment, the system is session-based, then go on to explain what it means to be "session-based." There may well be other, non-"session-based" embodiments that are also claimed by the patents-in-suit, but the limitations cited by defendant would apply to any claim that uses the word "session." See Mangosoft, Inc. v. Oracle Corp., 525 F.3d 1327, 1331 (Fed. Cir. 2006) ("even if we assume that this language properly addresses only an 'aspect' of the invention . . . this is precisely the aspect of the invention at issue."). Thus, the court will consider the cited language from the specification in construing the term "session."

The next issue is raised by defendant's inclusion of the "single server" limitation in its proposed construction. Plaintiff argues that the claims themselves refer to a "server system," as opposed to an individual server. See, e.g., '529 patent, claim 1. However, while the '529 patent does use the phrase "server system," defendant points out that the '639 patent refers to "a server" and "the server." The court is thus confronted with a situation where both parties are relying on the words of the claims themselves to reach diametrically opposed conclusions - plaintiff argues that the claims conclusively establish the presence of multiple servers, while defendant argues that the claims conclusively establish that the system contains only a single server. The court rejects both arguments.

Plaintiff further argues that the principles of claim differentiation preclude a construction where "server" means a single server, pointing to claim 11 (dependent on claim 1) from the '529 patent as describing a "sticky state" server. Plaintiff argues that "[i]f sticky state were an inherent part of the independent claims, this dependent claim would be nonsensical." Dkt. 119 at 11. However, it appears that plaintiff is conflating the specific requirements of claim 11 (the so-called "sticky state" server) with a more general "single server" requirement. Claim 11 covers "[t]he system of claim 1 wherein said server system stores the state of query and response of the client software, and restores the state of the client software after any interruption in said communication protocol, including an automatic or manual network interruption or termination of the session." '529 patent, claim 11. Thus, claim 11 essentially covers a type of "autosave" system between a client and a server, so that if the connection between the two is interrupted, the client and server can pick up where they left off before the interruption. This "sticky state" system is not co-extensive with a "single server" based system; in other words, a system can consist of a client and a single server without necessarily having these "sticky state" features. Thus, plaintiff's claim differentiation argument does not end the analysis.

Defendant then cites to one example from the specification and two examples from the prosecution file history where a single server is referenced. Specifically, defendant first cites to the '639 patent, which states that "[o]nce a session is established, all communications from the client IP address go to and from the same server." '639 patent, 8:63-67. However, there is some ambiguity as to whether this description was meant to apply to all session-based embodiments, or just a subset of those embodiments, so the court does not find this passage to be dispositive on the "single server" issue. Instead, the court looks to the two examples from the file history. First, defendant cites a portion of the patentee's remarks stating that "in the embodiment of the invention defined by Claim 1 [of the '529 patent], a client is capable of transmitting to a single server a plurality of queries, within the same session, i.e. within the session that is maintained between that client and

that single server." '529 file history, 04/13/05 Applicant Remarks (Dkt. 117, Ex. G) at 13. Second, defendant cites the patentee's argument for traversing a prior art rejection:

> [I]n Purcell, the primary goal is to allow a single query from a client to be simultaneously applied against multiple databases in a network. The system disclosed therein provides that any of the multiple databases that cannot service the specific client query return an empty result (indicating for example "sorry, I can't fulfill that request"). Indeed, it appears more advantageous to have a network-wide dispersal of the queries, so as to maximize the chances that at least one of the servers can provide the desired data, rather than to have those queries contained within a single session between a single client and a single server. The system then allows another database in the network that can fulfill the request to return the requested data. As such, Applicant respectfully submits that Purcell does not disclose a session-based environment, wherein a communication protocol provides an asynchronous session-based connection . . . Instead, Purcell appears to disclose a traditional synchronous means of requesting information, and not one that uses a session, as presently defined.

'529 file history, 12/21/05 Applicant Remarks (Dkt. 117, Ex. E) at 13 (emphasis in original).

As a threshold matter, the court recognizes that any prosecution history disclaimer must be "clear and unmistakable." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1326 (Fed. Cir. 2003). In the court's view, the first statement cited by defendant does not rise to that level. While the patentee does refer to the embodiment "defined by claim 1" (suggesting that the embodiment covers the entire claim scope), the statement simply says that the client "is capable" of transmitting queries to a single server. As a result, the court does not find this disclaimer to be sufficiently "clear and unmistakable," even though it does suggest a single server system.

The stronger argument comes from the patentee's remarks regarding Purcell. The patentee describes Purcell as dispersing client queries to multiple servers, "as to maximize the chances that at least one of the servers can provide the desired data, rather than to have those queries contained in a single session between a single client and a single server." Critically, the patentee then states that "[a]s such . . . Purcell does not disclose a session-based environment." (emphasis in original). The patentee's emphasis on "session-based" (and "asynchronous session-based connection" later in the sentence) is a clear indication that he is differentiating Purcell as not "session-based," because of the inclusion of multiple servers. Moreover, the patentee then expressly states that Purcell's

system is "not one that uses a session, as presently defined." The patentee's own statements suggest that he is defining "session" in a certain way for purposes of his invention, and that the definition of a "single session" requires "a single client and a single server." Thus, the patentee clearly and unmistakably disclaimed a multiple-server system during prosecution of the patents, and that disclaimer shall be incorporated into the court's construction of "session."

However, two obstacles prevent the court from adopting defendant's proposal in its entirety. First, even though defendant relies on the specification's disclosure that "in responding to a character the Server receives from a Client it can use the history of data that has been sent to and from the current user," the court notes that this sentence merely refers to a possible function of the system, rather than a requirement of the system. See '639 patent, 14:15-17; '529 patent, 12:12-14. That is, the server "can use the history of data" sent to and from the client in responding to a client request. (emphasis added). The heart of the "session" definition is contained in the specification's previous sentence, that "the server knows or recognizes when subsequent requests originate at the same Client." See '639 patent, 14:12-14; '529 patent, 12:9-11. Adding the "can use the history of data" language would not expand or contract the boundaries of the claims, and thus the court declines to include it.

Second, as discussed at the hearing, the court agrees with plaintiff that the word "state" (as used in defendant's proposed construction) is imprecise, and could create more disputes down the road. In the parties' joint statement, defendant offers some possible alternatives ("status," or "condition," or "relationship") but all suffer from the same problem - they are subject to interpretation as a subjective, mental state (or status, etc.) rather than an objective, technological state. Defendant argues that "'state' comes directly from the intrinsic evidence," but the court does not agree that "state" is used to describe what a "session" is. For instance, the patents-in-suit describe a feature where data can be "stored across Client session whereby the state and contents of the Client are automatically restored when a new Client session is started." '529 patent, 10:44-48. According to that

passage, when a new session is started, the old state is restored - suggesting that the two terms are not interchangeable. Defendant's other citations similarly fail to persuade the court that the patents-in-suit use the term "state" to describe what a "session" is. Instead, the best description of what a "session" is comes from the previous passage cited by defendant - that a "session" allows "the server [to] know[] or recognize[] when subsequent requests originate at the same Client." '639 patent, 14:12-14; '529 patent, 12:9-11. Based on that passage, the key aspect of a "session" is the association of related communications, so that the server can match up certain requests with an individual client. For that reason, the court prefers the concrete phrasing of plaintiff's proposal ("a related set of communications") over the more abstract proposals offered by defendant ("state" or "status" or "condition" or "relationship"). Thus, the court construes the term "session" as follows: "**a related set of communications between a client and a single server in which the server recognizes when consecutive requests originate from the same client**."

5. The "additional characters" terms

The parties agree that the following four phrases, all using the term "additional characters," should be given a common construction:

- "wherein each of the plurality of queries form an increasingly lengthening query string for retrieving content from the server; and wherein the server receives the plurality of queries from the requesting client, and in response to receiving each of one or more additional characters in the increasingly lengthening query string"

- wherein each of the plurality of queries form an increasingly lengthening query string for retrieving content from the server; and wherein the server receives the queries from one of the clients, and in response to receiving each of one or more additional characters in the increasingly lengthening query string"

- "wherein each of the corresponding consecutive queries lengthens the string by the additional characters, to form a lengthening string for retrieving the matching content from the server system"

- "wherein each one of the plurality of queries are consecutive and together form an increasingly focused query string for retrieving content from the server, and wherein each subsequent one of the plurality of queries extends the query string in the user interface by one or more additional characters"

The "additional characters" terms are found in claims 1 and 13 of the '639 patent and in claims 1, 44, and 45 of the '529 patent. Plaintiff originally proposed that the terms should be given their plain meaning. After the hearing, plaintiff opted to submit a proposed construction, and now contends that the "additional characters" terms should be construed to mean "one or more characters added to the query after being input by a user of the client software." Defendant contends that the terms should be construed to mean "each query consists only of the changes to the input string that were not sent in any previous consecutive query."

Going back to the "Madison Square Garden" example discussed above, the key dispute here is over which characters are sent to the server as the user types in the letters "m-a-d-i." Plaintiff argues that the claims describe a "lengthening string" that is sent, so that the client would send the letter "m" after the user types it, then would send the letters "m-a," then "m-a-d," and so on. Plaintiff challenges the idea that the characters are sent piecemeal for the server to "glue" together. Defendant, on the other hand, argues that the server does indeed "glue" the characters together as they are received. In defendant's view, the client would send the letter "m" after the user types it. Then, when the user continues to type, the client would send the letter "a" without re-sending the letter "m." Defendant concedes that the letters do not need to be sent individually, but maintains that only the changes to the search string are sent - so if the client types "m-a-d," the client might first send the letter "m" followed by the letters "a-d" together. In defendant's view, the key aspect of the invention is that no character is ever re-sent to the server - so in this example, the letter "m" is sent to the server once and only once.

The court agrees with defendant here. First, the claim language itself suggests that the "lengthening string" is formed by piecing together multiple smaller queries, rather than

by receiving iteratively longer versions of the string. Claim 1 of the '529 patent describes how "consecutive additional characters" are input at the client and sent as "consecutive queries" to the server, "wherein each of the corresponding consecutive queries lengthens the string by the additional characters, to form a lengthening string." The server then "receiv[es] each of the corresponding consecutive queries that modify the lengthening string." The words "lengthens" and "modify" suggest that the server is not wiping its slate clean with each new submitted query, but is instead combining the queries to form the "lengthening string." The specification confirms this understanding, as "the protocol of the current invention" is one that "send[s] just the changes to the input buffer, instead of sending the entire input buffer." '529 patent, 20:11-14. Consistent with Trading Techs. and Honeywell, the court finds that the use of "the current invention" here indicates that the description is intended to apply to the invention as a whole, and not just a single embodiment. While plaintiff does provide support for its argument that each "change" can be more than just a single character, it does not provide adequate support for its argument that the entire character string is re-sent as the user types in a query. Accordingly, the court construes the "additional characters" terms as follows: "**only the changes to the input string that were not sent in any previous consecutive query**."

C. Conclusion

In accordance with the foregoing, and for the reasons discussed above, the court construes the parties' disputed terms as follows:

1. "content-based cache" and "query and result cache" mean "a store of previous queries and corresponding result sets executed by the system."
2. "asynchronous connection" means "a connection that allows both the client and the server to initiate communications at any moment in time within a session."
3. "communication protocol" means "a set of rules that enable computers to exchange messages with each other."

4. "session" means "a related set of communications between a client and a single server in which the server recognizes when consecutive requests originate from the same client."

5. The "additional characters" terms mean "only the changes to the input string that were not sent in any previous consecutive query."

IT IS SO ORDERED.

Dated: May 28, 2013

PHYLLIS J. HAMILTON
United States District Judge