United States District Court,
W.D. Texas.

ATSER RESEARCH TECHNOLOGIES, INC,
Plaintiff.
v.
RABA-KISTNER CONSULTANTS INC., Raba-Kistner Infrastructure, Inc., Raba-Kistner-Anderson Consultants, Inc., Brytest Laboratories, Inc., and Lone Star Infrastructure, Joint Venture,
Defendants.

No. SA-07-CA-93-H

March 2, 2009.

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ORDER REGARDING CLAIM CONSTRUCTION

HARRY LEE HUDSPETH**, Senior District Judge.**

This is an order construing asserted patent claims in an allegation of patent infringement. Plaintiff Atser Research Technologies, Inc. ("Atser") asserts that Defendants Raba-Kistner Consultants, Inc., Raba-Kistner Infrastructure, Inc., Raba-Kistner-Anderson Consultants, Inc., Brytest Laboratories, Inc., and Lone Star Infrastructure, Joint Venture, infringe United States Patent No. 6,826,498 (the "'498 patent").

I. The Technology

This patent concerns a computer-implemented method for performing quality control on construction pavement mixtures by applying test methodologies to field samples.

II. Applicable Law

Claim construction is a matter of law. Markman v. Westview Instruments, Inc., 517 U.S. 370, 391, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the rights 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)).

The words of a claim are given their ordinary and customary meaning, which is "the meaning that the term

would have to a person of ordinary skill in the art in question at the time of the invention," as measured by the effective filing date of the application. Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed.Cir.2005) (en banc) (citations omitted). The person of ordinary skill in the art is deemed to read the claim term in the context of the claim in which it appears and in the context of the entire patent, including the specification. **Id.** But it is improper to read limitations from the written description into a claim. **See** Tate Access Floors, Inc. v. Maxcess Techs., Inc., 222 F.3d 958, 966 (citing Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1362 (Fed.Cir.2000)). Elements of a preferred embodiment should not ordinarily be read into claim language that is broader than such embodiments. Id. at 966-67.

"Where the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it." **02** Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed.Cir.2008). In claim construction, courts first examine the intrinsic evidence, which includes the claims, the specification, and the prosecution history, if in evidence. **See** Tate Access Floors, 222 F.3d at 965 (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996)). The specification "is always relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (quoting Innova/Pure Water, 90 F.3d at 1582).

The prosecution history is less useful than the specification and claims because it represents the ongoing negotiation between the PTO and the patentee. Phillips, 415 F.3d at 1317. The prosecution history, however, is helpful when it demonstrates how the inventor understood the invention or shows that the inventor limited the invention in the course of prosecution. **Id.**

Although the use of extrinsic evidence is not forbidden, it is generally less significant than the intrinsic record. Nazomi Communs., Inc. v. Arm Holdings, PLC, 266 Fed.Appx. 935, 939 (Fed.Cir.2008) (citation omitted).

III. Construction of Claim Terms

On February 28, 2008, the parties jointly filed a listing of outstanding claim terms, which they had reduced to eighteen. The Court will not address the terms on which the parties have indicated an agreed construction.

A. Computer-Implemented Method

The Plaintiff argues that this term does not require construction, but submits "method implemented using a computer" if construction is required. The Defendants propose "a method where the steps are automatically performed by a computer without human intervention." The parties agree that the preamble of the claim is limiting.

The parties disagree whether this term requires a construction that limits the computer-implemented method to one that is "automatically performed" and that is performed "without human intervention." Advocating automatic performance and lack of human intervention, the Defendants argue that the Plaintiff's definition is so broad that it is meaningless. The Court finds the Defendants' argument unpersuasive. The Defendants are attempting to add limitations into the language of the claim. Nowhere in the phrase "computer-implemented method" is it stated or implied that a computer implements the method without human intervention or that the computer automatically implements it. The Plaintiff points to FIGS. 3B and 4A-F in the specification to show that the user is involved in the computer-implemented method. The Plaintiff also points to the specification in col. 7: 57-63, which describes the user performing actions such as selecting a communications port, capturing test results, and clicking a button.

The language in the prosecution history cited by the Defendants is also unpersuasive. In the prosecution history language quoted-from ATSER_R_ 0000807-the patentees responded to the Examiner that he did not point to evidence in a Martinez reference that gave a motivation to modify the reference to meet the teachings of independent claims one or thirteen. The patentees characterized "the claimed invention of claim one and thirteen of sending information collected from the material mixture to the server; applying one or more test methodologies to the collected information; generating one or more reports from the test methodologies; and sending the one or more reports to a project manager." This is merely a repetition of the claim language of claim one and does not add in the limitations that the Defendants request. Tying claim thirteen to the broad language of claim one, without the supposed link even adding any distinguishing limitation, does not add a limitation to claim one.

Each claim in a patent is presumed to have a different scope. AllVoice Computing PLC v. Nuance Communs., Inc., 504 F.3d 1236, 1248 (Fed.Cir.2007) (citations omitted). Claim thirteen is directed to "a system for performing quality control on a pavement construction material mixture." The disputed phrase from claim one is "computer-implemented method." Claims one and thirteen have differing scopes as shown by the different language used in each.

The Defendants also claim support from several places in the specification-the description of a system that uses one centralized resource (col.2:34-36), that the program is run on a computer (col.3:1-4), and that FIG. 2 shows a process on the server (col.4:1-3). These citations do not support limiting claim one to automation and a lack of human intervention. FN1 The specification supports user interaction. Col. 2:34-35 ("system allows a user to analyze material testing data from beginning to the end using one centralized resource"); col. 2:37-38 ("allows the user to control and monitor progress relating to the analysis of the materials"); col. 2:43-44 ("also highly responsive to user requests"); col. 4:3-4 ("browser based user interfaces are used to collect test result inputs"); col. 7:30-8:7 (as discussed above). Further, FIGS. 3, FIGS. 4A-F, and the description of those figures shows embodiments that include user interaction. Col. 7:30-8:7. Even without those embodiments, it would ordinarily be improper to import a claim limitation from an embodiment when that limitation is not found in the broader claim language itself. Tate Access, 222 F.3d at 966.

FN1. The Defendants also argue that the language the patentees used in col. 8:15-24, where the patentees stated that the invention has been described in detail to comply with the patent statutes, limits the invention to the embodiment in FIG. 2. This argument is unconvincing since the embodiments in FIGS. 3 and 4A-F are also included in the detailed description in the specification. This is not a case where a single preferred embodiment is specifically described as the whole of the invention and so limits the claims.

The Defendants also argue that claim one is different from the embodiment shown in FIGS. 3 and FIGS. 4A-F because those embodiments apply test methodologies to "construction materials" instead of "collected information." These embodiments connect test equipment to a sample where the equipment takes measurements, which are used in the test that are run. The Defendants seek to distinguish this from a situation where the test methodologies are applied to information entered by the user. This argument is contradicted by the language of the patent. It states, for example, that the user sets up a communication port with the equipment that he has selected and selects a test type, and clicks a button to enter the information when he is ready to run a test. Col. 7:30-49. It is information that is sent in the communications port. It is information collected from the construction material that is tested. There is no requirement in the claim that the user collect the information and then let the computer implement the testing.

Construction: A method where the steps are performed using a computer.

B. Quality Control

This term is in the preambles to claims one and thirteen. The parties agreed that the preambles are limiting. The Plaintiff argues that this term does not need construction, but offers "techniques used to sustain the quality of a product or service in order to satisfy given requirements" if the Court determines that a construction is necessary. The Defendants ask that the term be construed as "the activities performed by a contractor to make sure that a product or service meets established construction criteria such as material specifications."

The parties dispute whether the patent limits the performance of quality control to contractors. In support of its argument that it does, the Defendants cite to col. 1:49-57 and col. 7:5-14. These citations state (1) that many construction contracts contain pay incentives that are performance based and (2) that contractors can track quality control and acceptance results on a real-time basis in order to maximize bonus payments and reduce penalties for non-conforming materials. Although this citation shows that contractors can perform quality control, this section does not limit it to performance only by contractors.

The Defendants' next citation is a description of the process in FIG. 2 that states that results are given in a statistical comparison between "the contractors' quality control test results and the owners' quality acceptance results." Here again, this language indicates that contractors could have quality control test results, but it does not limit quality control to contractors.

Other instances of the disputed phrase occur in the patent. *See* col. 1:35-36; col. 3:61-63; col. 2:51-52; col. 7:15-16; col. 7:30-49. The patent does not specify that the quality control must be performed by a contractor, but it identifies a contractor as one person who would perform quality control. The non-specific identification of the quality control performer is reinforced by the patent's repeated description of the person performing the steps in the process as the "user."

Both the Plaintiff and Defendants provided extrinsic evidence to support their definitions in the form of reference materials. Both sides also offered experts to testify to the meaning of this term. The Plaintiff's expert testified that while quality control is a contractor's responsibility, it can be performed by third-parties, the contractor, or vendors. The Defendants' expert testified that quality control is performed by the contractor and quality assurance is performed by the owner. Both experts agreed that quality assurance is the province of the owner.

Taken as a whole, the evidence does not establish that there was a meaning of the term "quality control" to a person of ordinary skill in the art at the time of the invention that requires a contractor to perform quality control.

Construction: The activities performed to make sure that a product or service meets established criteria.

C. Pavement Construction Material Mixture

This term is found in claims one and thirteen. The Plaintiff proposes "a mixture of materials for use in constructing pavement, including without limitation soils, aggregates, asphalt, cement asphalt and concrete mixes." The Defendants propose "a construction pavement mixture of constituent raw materials that includes

one or more aggregates, soils, asphalt, cement asphalt, and cement." The parties agree that the term is limited to construction pavement and that it includes aggregates, asphalt, cement asphalt, and concrete/cement.

This disputed term appears only in the claims of the patent, so the specification does not provide an explicit definition. The patentee does state in the background of the invention, "[t]o ensure that the materials conform to the specification, various tests have been developed for standard test methods for Quality Assurance/Quality Control of soils, aggregates, asphalt, cement asphalt, and concrete mixes." Col 1: 34-37. The patentees also listed various types of tests that can be performed, including soil test methodologies (col.2:12), asphalt test methodologies (col.2:18-19), asphalt mix test methodologies (col.2:23), concrete mix test methodologies (col.2:28), and aggregate test methodologies (col.4:27). The patentees also specified that the server allows the consumer to use software packages for standardized tests for "soils, aggregates, asphalt, cement asphalt and concrete mixes." Col. 3:63-64.

The dispute in this term is whether the disputed phrase is a mixture of constituent raw materials. The Defendants argue that the mixture must be made of "constituent raw materials." The Defendants argue that this is the definition of a mixture, but they do not offer any evidence for that argument. The Defendants also point to a statement in the prosecution history where the patentees distinguished their invention over two Harbuda references because those references related to manufacturing raw material and lacked the construction material mixture required by the claims. *See* ATSER_R_0000806. This prosecution history evidence does not, however, limit the disputed term or the claimed invention to a mixture of constituent raw materials. In fact, the Defendants' own expert testified that the disputed term could be a blend of raw and pre-processed materials. Adding a limitation that the mixture be made up of constituent raw materials is unhelpful to a jury and inconsistent with the evidence presented.

Construction: A mixture of materials used to construct pavement. Such materials include soils, aggregates, asphalt, asphalt mix, cement asphalt, and concrete mix.

D. Server

This term is found in claims one and claim thirteen. The Plaintiff contends that the term does not require construction, but submits "a computer that provides services to another computer." The Defendants submit "a computer that applies one or more test methodologies to the collected information; generates one or more reports from the test methodologies; and sends the one or more reports to a project manager."

The Plaintiff's definition is supported by citation to technical dictionaries. The Defendants state that claim thirteen and the description in the specification of server 100 gives a particular meaning to the disputed term in the context of this patent. In particular, the Defendants point to col. 4:1-3, where the patentees state that FIG. 2 is an exemplary process for providing a Laboratory Information Management System on the server.

The patent specification does not support the Defendants' definition. The server is accessed on a wide-area network and receives information collected from the material mixture. Col. 1: 62-64. The server is connected to a network and can have a web site. Col. 3:6/ 10-12. In one embodiment, the server collects inputs (col.4:5). The server can be an individual server or a collection of several. Col. 3:25-26. The server can be protected by a firewall. Col. 3: 46. It allows a consumer to log on to a software package incorporating standard testing methods. Col. 3:60-65. None of these uses requires that the server apply the test methodologies, generate the reports, and send the reports to a project manager.

It is possible for a patentee to act as his own lexicographer and redefine a term away from its ordinary meaning. Phillips, 415 F.3d at 1316. But when he does so, the patentee must express an intent to redefine a term. Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp., 493 F.3d 1358, 1367 (Fed.Cir.2007) (citation omitted). The patentees in this case have not expressed intent to redefine this term.

The Defendants are attempting to require that tasks explicitly assigned to the server in claim thirteen also be included as limitations in claim one through the redefinition of the word "server." While the server must be capable of performing the functions explicitly recited in claim thirteen, the definition of server in claim one is not limited to the functions of claim thirteen. Claims are presumed to have differing scopes. AllVoice Computing, 504 F.3d at 1248 (citations omitted). To redefine "server" so that it has the same functions in claim one as in claim thirteen without some other basis for doing so would be improper. FN2

FN2. It is also unnecessary to define "server" to include the claim language that follows it in claim thirteen since the claim already has that language.

In some cases, the ordinary meaning of the claim language is readily apparent and involves little more than the application of the widely accepted meaning of a commonly understood word. Phillips, 415 F.3d at 1314. That is the case with this term. The Plaintiff supports its construction with technical dictionaries that have definitions for "server" such as "a computer or software package that sends requested information to a client or clients in a network." MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1905 (6th ed.2003). Another relevant definition is "on the Internet or other network, a computer or program that responds to commands from a client." MICROSOFT COMPUTER DICTIONARY 403-04 (4th ed.1999). Finally, a server is also defined as "a computer whose role in a network is to provide services and resources to users." MICROSOFT ENCYCLOPEDIA OF NETWORKING 1107 (2000). The Defendants do not offer contradictory dictionary citations, but merely rest on the argument that the patent specifically defines this term.

The Defendants also contend that this term is part of a means-plus-function term only in its use in claim thirteen. For the reasons discussed in construing the term "Server Applying One or More Test Methodologies to the Collected Information; Generating One or More reports from the Test Methodologies; and Sending the One or More Reports to a Project Manager" below, this Court does not agree. The Defendants also provide no basis for departure from the rule that claim terms are to be interpreted consistently throughout various claims of the same patent. **See** Callicrate v. Wadsworth Manuf. Co., 427 F.3d 1361, 1371 (Fed.Cir.2005); Research Plastics, Inc. v. Federal Packaging Corp., 421 F.3d 1290, 1295 (Fed.Cir.2005) (citing Phillips, 415 F.3d at 1313-14 and Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed.Cir.2001)).

Construction: A computer that provides services to another computer.

E. Wide-Area-Network

The Plaintiff contends that this term does not require construction, but it alternately proposes "a computer network that spans a relatively large geographical area." The Defendants propose the construction "a geographically dispersed communications network." Both parties agree that the network spans or is dispersed over a large geographic area. The dispute: is whether the network is a computer network or a

communications network.

Neither party argues that the patent explicitly defines this term. The patent states that the method can provide an interface to access the server located on the wide-area-network. Col. 2:2-4. The patent also provides that the Internet is an appropriate: environment for processing a laboratory material analysis, which is connected to a server. Col. 3:57. Claim one states that one: step of the method is "accessing a server located on a wide-area-network ." Claim thirteen requires a wide-area-network with "one: or more client computers coupled to the wide-area-network." Thus, it is clear that the network allows for computer access, but the patent does not specify whether the network is a communications network or a computer network.

The Defendants state without evidence that the Internet allows computers to connect to it, but that they are not part of the Internet. Because the patent gives the Internet as an example of a wide-area-network, the Defendants contend that the disputed term means that computers can connect to a wide-area-network but are not a part of one.

The Plaintiff contradicts the Defendants' assertion with evidence. A wide-area-network is defined in one technical dictionary as "a computer network that spans a relatively large geographical area.... The largest WAN in existence is the Internet." RANDOM HOUSE WEBSTER'S COMPUTER & INTERNET DICTIONARY 607 (3rd ed.1999). Another source, dated from the year the patent was filed, defines a wide-area-network as "a geographically distributed network composed of local area networks joined into a single large network using services provided by common carriers." MICROSOFT ENCYCLOPEDIA OF NETWORKING 1329,30 (2000). That source also defines a local area network as "a group of computers located in the same room, on the same floor, or in the same building that are connected to form a single network.... They might use a dedicated backbone to connect multiple subnetworks, but they do not use any telecommunication carrier circuits or leased lines except to connect with other LANS to form a wide area network." **Id.** at 718. Another source defines a WAN as "a geographically widespread network, one that relies on communications capabilities to link the various network segments. A WAN can be one large network, or it can consist of a number of linked LANS (local area networks)."

From these extrinsic sources, it is clear that neither party is exactly right. The definition of a wide-area-network encompasses both ideas that are being disputed. It is a collection of LANs-a collection of computer networks-but it is also the communications network between those smaller networks.

Construction: A geographically distributed network composed of smaller networks of computers that are joined into a single large network using communications services provided by one or more common carriers. The Internet is an example of a WAN.

F. Sending Information Collected from the Pavement Construction Material Mixture to the Server

This term is found in independent claim one. The Plaintiff argues that this term does not need construction, but it proposes "sending data collected from the testing of the pavement construction mixture to the server." The Defendants contend that this term means that information is sent to the server computation spooler, and so they propose the term "sending test data that has been collected from testing of the pavement construction material mixture to a server computation spooler." The fundamental dispute over this term is whether it requires the information to be sent to the server computation spooler.

The Plaintiff argues that it is improper to limit the claims to a preferred embodiment. The Plaintiff also cites

col. 4:3-5, which describes part of FIG. 2: "browser based user interfaces are used to collect test result inputs (step 201). These inputs are collected by the server 100 ...." The Defendants argue that the Plaintiff's intrinsic evidence is really an explanation of collecting the information, not sending it as is used in this disputed phrase. The Defendants argue that the description of FIG. 2 is the only depiction of information being sent to a server, and that the figure shows the information from the "Inputs via Browser I/F" going to a computation spooler. The Defendants again cite to col. 8:15-19 as limiting the patent to the specific embodiments given in FIG. 2, as they have for other terms. As explained previously, col. 8:15-24 is not a clear limitation of the claims to any specific embodiment provided.

The only explicit mention of sending information to the server in the patent comes in the claims or in language echoing the claims (e.g., in the abstract) without providing further guidance as to their meaning. Although claims are to be construed in light of the specification, of which they are a part, it is important not to import limitations from the specification that are not found in the claims. Phillips, 415 F.3d at 1323. Here, the specification does not give a meaning to the disputed phrase to one of ordinary skill in the art that requires sending information to the server to mean that information is sent to a computation spooler. The Defendants are improperly attempting to import this limitation.

Construction: Sending data collected from the testing of the pavement construction mixture to the server.

G. Applying One or More Test Methodologies to the Collected Information

This term is found in claims one and thirteen of the patent. The Plaintiff proposes that the term does not need construction, but also offers "using a computer to perform calculations for one or more test methodologies using the data collected from the testing of the pavement construction material." The Defendants propose the construction "a server computation engine automatically *applying one or more test methodologies to the collected information* stored in the server computation spooler in response to the server computation spooler activating the server computation engine, and automatically storing the results in a project specific database on the server" (emphasis added).

The Defendants attempt to shoehorn the limitations that they argued for in previous claims into this disputed phrase. First, the Defendants argue that the test methodologies must be performed automatically. The Defendants support this argument by citing to their arguments that were rejected above. Second, the Defendants argue that collected information is stored in the computation spooler as in the FIG. 2 embodiment. This argument has also been rejected in the construction of the previous term for the reasons state therein.

Third, the Defendants add in the limitation that applying test methodologies involves automatically storing the results in a project specific database on the server. The Defendants do not offer support for why this disputed phrase should encompass the unrelated step of storing the results.

Fourth, the disputed phrase is intact and unchanged in Defendant' proposed construction, but it is buried in the additional limitations the Defendants attempt to jam into this construction. The Defendants' definition does not "construct" any of the disputed phrase, but instead attempts to re-write the claim through this phrase.

In contrast, the Plaintiff's proposed construction is based upon the words of the claim itself, including the parties' agreement that the preamble limits the claim to a computer-implemented method.

Construction: Using a computer to perform calculations for one or more test methodologies using the data collected from the testing of the pavement construction material.

H. Generating one or more reports from the test methodologies

This disputed phrase is found in claims one and thirteen. The Plaintiff asserts that this term does not need construction, but also offers "using a computer to generate one or more reports based on the results of the test methodologies." The Defendants propose construing the phrase as "a server report spooler automatically *generating one or more reports from the results of the test methodologies* and automatically storing the report in a server project specific web site directory in response to the server computation engine storing the results of the test methodologies in the server project specific database" (emphasis added).

Here again, the Defendants include nearly identical language to the disputed phrase within the proposed construction. This is because the Defendants are not construing the claim in light of the specification, but they are importing elements found in the specification into the claim language. The Defendants do not make any new arguments in support of this proposed construction beyond repeating the theory that the claims should be limited to the specific embodiment in FIG. 2 and descriptions of that figure. The arguments regarding automation and the limitation to FIG. 2 to interpret the claim language have been rejected above and are rejected for the same reasons here.

The remaining dispute is whether a computer or a server must perform the step. The Defendants' only support that the step of report generation must occur on a server is by arguing that the step is limited to the FIG. 2 embodiment. The Plaintiff argues that claim thirteen specifies a server is used, so claim one must mean something different under the rules of claim differentiation. Claim one also specifies that the server is located on a wide-area-network and that the information collected from the pavement construction material mixture goes to the server. The omission of specificity that the server must perform the steps of applying the test methodologies, generating the reports, and sending the reports to the project manager in close proximity to steps that specify the use of a server leads this Court to believe that those steps are not restricted to performance by a server in claim one. Since the parties agree that the preamble is limiting, this means that the steps are performed on a computer in the computer-implemented method.

Construction: Using a computer to generate one or more reports based on the results of the test methodologies.

I. Project Manager

The Plaintiff argues that this term should be construed as "an individual or entity assigned to carry out and be responsible for construction of all or a specified portion of a project," if a construction is necessary. The Defendants propose the construction "the contractor who is responsible for the methods and sequences of construction processes, and for the pavement construction material mixture meeting specifications." This term is found in claims one and thirteen.

While the Defendants argue that this disputed phrase has a specific meaning in the context of the patent, they also concede that the patent does not provide an express definition of this term. The Defendants argue that only contractors perform "quality control" in the context of this patent (an argument rejected above) and that they are responsible for "keeping material processes within specifications." Although it is true that one of the benefits of the patent is described as allowing quality control, the patent never links quality control

performance to the project manager beyond his role in the claims or in receiving an email for viewing the final report online. The patent also never limits quality control to a contractor, as discussed above, so the Defendants cannot limit the project manager to a contractor through his supposed role in quality control as they attempt.

The Plaintiff cites to a Construction Dictionary and a treatise on Construction Project Administration in support of its definition. These sources, however, depict the project manager as an individual, not as "an individual or entity" as the Plaintiff suggests. The ordinary meaning of the term as it would be to one of ordinary skill in the art is plain with the support of these technical resources.

Construction: An individual assigned to carry out and be responsible for construction of all or a specified portion of a project.

J. Sending The One or More Reports to a Project Manager

The Plaintiff proposes the construction "using a computer to provide the one or more reports to a project manager," although it contends that the term does not need construction. The Defendants offer the construction "the server storing the generated report or reports in a server project specific web site directory and in response to such storing, automatically sending an electronic notification to the project manager that the report is ready for review." This term is found in claims one and thirteen.

The Defendants' arguments again rest on limiting the claim language to the embodiment in FIG. 2, including limiting the claim term to performance by a server rather than a computer and requiring automation of the step of sending the reports. These arguments have been repeatedly rejected above, and the Court rejects them here again for the same reasons.

The patent is not so limited as the single embodiment of a computer-implemented method of sending a report that the Defendants propose. The patent discloses sending an email notification to a project manager for viewing the final report online. Col. 4:22-24. The patent also discloses sending the report to the screen in real time (col.7:61-65) and printing results (col.8:3-4). Each of these are computer-implemented ways the results could be sent to a project manager, since the claim does not specify that the reports must be sent via email.

Construction: Using a computer to provide the one or more reports to a project manager.

K. Statistically Comparing Test Results in Determining Pay Factor Adjustments and Material Acceptance

This term is found in claim twelve, which depends from independent claim one. The Plaintiff proposes that this term does not need to be construed, but offers "using a computer to perform statistical analysis and to compare the results of the analysis to the specification requirements for the pavement construction material mixture in order to determine pay factor adjustments and material acceptance." The Defendants propose "the server performing statistical analysis and comparing the results of the analysis to the specification requirement for the pavement construction material mixture in order to determine pay factor adjustments and material acceptance."

As is clear from the proposed definitions, the only dispute is whether the step must be performed by a server or by a computer. Here the Defendants again argue that the claims are limited to the embodiment in

FIG. 2. This argument has been previously rejected and the Court rejects it here for the same reasons.

The patent describes statistical analysis in col. 7:4-14. It states that the software can statistically compare the test results and that statistical comparisons are performed by plotting test results against quality acceptance results. It also states that various statistical tests can be used that are important for both contractors and owners to determine pay factor adjustments and determine material acceptance. The patent does not limit statistical analysis to performance by a server.

Construction: Using a computer to perform statistical analysis and compare the results of the analysis to the specification requirement for the pavement construction material mixture in order to determine pay factor adjustments and material acceptance

L. Client Computers

The only occurrence of this term in the patent is in claim thirteen. The Defendants propose the construction "a computer coupled to the wide-area-network and adapted with a graphical user interface, such as a browser, configured to receive test data for and properties of the pavement material mixture." The Defendants arrive at their construction first by including the surrounding words of the claim. Such inclusion is redundant and unnecessary.

The Defendants also argue that the collection of information required by the claim is defined by browser box 201 in FIG. 2. The Defendants argue that the specification directs that client workstations can be computers running browsers in col. 3:8-11.

The Plaintiff proposes that the term not be construed, but offers the construction "a computer that receives services from another computer." The Plaintiff bases its definition on extrinsic evidence in the form of technical dictionaries.

The Defendants' proposed construction, stripped of the portions already in claim thirteen, is "a computer adapted with a graphical user interface, such as a browser." The Plaintiff's definition is largely the same as this revised version of the Defendants'. The patent does not require that the client workstation have a browser as the Defendants suggest, but it does require that the client workstations communicate with the network. Col. 3:5-67.

The extrinsic evidence cited by the Plaintiff proves a commonly understood meaning of the disputed phrase for networks using client-server architecture like the patent. "Clients are PCs or workstations on which users run applications. Clients rely on servers for resources, such as files, devices, and even processing power." RANDOM HOUSE WEBSTER'S COMPUTER & INTERNET DICTIONARY 94 (3rd ed.1999). "Client" is also described as "a hardware or software entity that requests shared services from a server," while the definition for a client-server system is "a computing system composed of two logical parts: a server, which provides information or services, and a client, which requests them. On a network, for example, users can access server resources from their personal computers using client software." MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 406 (6th ed.2003).

Construction: A computer that requests information or services from a server.

M. Server Applying One or More Test Methodologies to the Collected Information; Generating One

or More Reports from the Test Methodologies; and Sending the One or More Reports to a Project Manager

This term is found only in claim thirteen. Here, the claim language specifies that the server must perform the steps. The Court has previously construed the components of this term, so this construction includes the previous constructions.

The Defendants also argue that this term is a means-plus-function term. The Defendants argue that there are three functions in the claim-"applying one or more test methodologies to the collected information," "generating one or more reports from the test methodologies," and "sending the one or more reports to a project manager." The Defendants acknowledge that none of these terms employs the classic "means-for" language that invokes a rebuttable presumption that means-plus-function claiming applies. **Callicrate,** 427 at 1368. The lack of the use of the word "means" invokes a rebuttable presumption that means-plus-function claiming *does not* apply. Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed.Cir.2004) (citation omitted). The Defendants, however, argue that the claim recites a function without sufficient structure, which is sufficient to invoke means-plus-function claiming without using the word "means." **See** Duratech Indus. Int'l v. Bridgeview Mfg., 292 Fed. Appx. 931, 933 (Fed.Cir.2008).

The Defendants' argument is inconsistent with its previous arguments. The Defendant previously addressed the terms "applying one or more test methodologies to the collected information," "generating one or more reports from the test methodologies," and "sending the one or more reports to a project manager" in claim one without arguing that they lacked sufficient structure such that means-plus-function claiming would apply. The Defendants now argue that the addition of the word "server" means that there is insufficient structure in these phrases.

The Defendants' argument is backwards. If means-plus-function applies, then a server alone is not sufficient structure. Aristocrat Techs. Austl. PTY Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1333 (Fed.Cir.2008). Here the Defendants are arguing that the addition of the server invokes means-plus-function claiming. The Defendants rely only upon the words of the claim to do so; they do not cite the prosecution history or other intrinsic evidence to show a use of the term that comports with means-plus-function claiming. The Federal Circuit has held that the presumption against means-plus-function treatment is strong in claim terms that do not include the word "means." **See** Mass. Inst. of Tech. v. Abacus Software, 462 F.3d 1344, 1356 (Fed.Cir.2006) (citing Lighting World, 382 F.3d at 1362 ("[W]e have seldom held that a limitation not using the term 'means' must be considered to be in means-plus-function form," and "the circumstances must be [unusual] to overcome the presumption ...."). It is an error to require that the claim limitation identify specific structure instead of a generic term that includes a wide variety of structures. Lighting World, 382 F.3d at 1359. "[I]t is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function." Id. at 1359-60. The Federal Circuit went on to state that "[w]hat is important is whether the term is understood to describe structure, as opposed to a term that is simply a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term 'means for.' " Id. at 1360.

As with the disputed word in that case, dictionary definitions in evidence here make clear that a server is a noun that denotes a type of structure. In this case, the noun is modified by the functional phrases-"applying ...," "generating ...," and "sending ...." Thus the structure of the server is further specified by the function that it is performing in each step.

While it may seem a paradox that the patentee be allowed to use a server performing specific functions in a claim to avoid means-plus-function language, it is because the statute allows the patentee the choice to present his claim in means-plus-function format and rely on the specification for structure or to specify a particular claim that passes the patent examination in non-means form. The patentees used means-plus-function language in dependent claims, proving that they knew of the doctrine and how to employ it in the claims. For this disputed term, the patentee chose non-means language, and the Defendants have not met the their burden to show that this Court should overturn that choice.

Construction: A server that (1) performs calculations for one or more test methodologies using the data collected from the testing of the pavement construction material, (2) generates one or more reports based on the results of the test methodologies, and (3) provides the one or more reports to a project manager.

N. Means for Applying Aggregate Test Methodologies; Means for Applying Soil Test Methodologies; Means for Applying Asphalt Test Methodologies; Means for Applying Asphalt Mix Test Methodologies; Means for Applying Concrete Mix Test Methodologies

The parties agree that these terms found in dependent claims fourteen, sixteen, eighteen, and twenty are means-plus-function terms governed by 35 U.S.C. s. 112, para. 6. Under Federal Circuit precedent, a claim limitation that uses the language "means ... for" invokes a rebuttable presumption that 35 U.S.C. s. 112, para. 6 applies. **See** Gemstar-TV Guide Int'l, Inc. v. ITC, 383 F.3d 1352, 1361 (Fed.Cir.2004). Means-plus-function terms are those "purely functional limitations that do not provide the structure that performs the recited function." Phillips, 415 F.3d at 1311.

To construe a means-plus-function term, the Court should first identify the recited function within the claim limitation and then examine the written description to determine the corresponding structure that performs that function. Gemstar, 383 F.3d at 1361. The Federal Circuit directs a Court to look to the claim language to determine the function of the claim limitation. **See** Gemstar, 383 F.3d at 1361. In fact, the Federal Circuit has said that it is improper to adopt any function different from that explicitly recited in the claims. Creo Prods., Inc. v. Presstek, Inc., 305 F.3d 1337, 1344-45 (Fed.Cir.2002). The parties agree that the claims recite the following functions:

Disputed Phrase	**Recited Function**
means for applying aggregate test methodologies	applying aggregate test methodologies
means for applying soil test methodologies	applying soil test methodologies
means for applying asphalt test methodologies	applying asphalt test methodologies
means for applying asphalt mix test methodologies	applying asphalt mix test methodologies
means for applying concrete mix test methodologies	applying concrete mix test methodologies

The next step is to determine the corresponding structure disclosed in the specification. The Plaintiff argues that each corresponding structure is the computation engine shown in Figure 2 applying the particular methodology called for in each respective phrase. The Defendants argue that the corresponding structure

must be a disclosed algorithm for performing the recited functions on a server. Since the parties agree that the patent does not disclose algorithms for performing the recited functions on a server, the Defendants ask the Court to declare these claims invalid under 35 U.S.C. s. 112. The Defendants do offer constructions for the corresponding functions, each one a variation of "a server programmed to automatically execute ___ test methodologies in accordance with an algorithm for applying ___ test methodologies to test data stored on the server," where the blanks represent the respective types of test methodology in each recited function.

The dependent claims at issue are all dependent on claim thirteen. Claim thirteen requires "the server applying one or more test methodologies to the collected information." As an example, claim fourteen further comprises means for applying aggregate test methodologies. The patent specifies that the aggregate test methodologies can include one or more of the Los Angeles Abrasion Soundness Test; 24 Hours Water Absorption Sand Equivalent; Unit Weight and Voids in Aggregate; Specific Gravity, Water Absorption and Moisture; and Clay Lumps and Friable particles in Aggregate. Col. 2:5-10. The patent specifies that applying soil test methodologies can include Soil Liquid, Plastic Limit and Plasticity Index; Material in Soil Finer Than # 200 Sieve; Moisture and 15 Density of Soil-Aggregate In-Place by Nuclear Method; Moisture Content; Specific Gravity of Soil; Unconfined Compressive Strength of Cohesive Soil; Sieve Analysis; and Compaction Test. Col. 2: 10-18. The patent specifies that applying asphalt test methodologies can include one or more of Extraction; AES300 Emulsion Test; and ARA-1 Rejuvenate Agent. Col. 2:19-21. The patent specifies that applying asphalt mix test methodologies can include Ignition Test; Actual Specific Gravity; Theoretical Maximum (Rice) Specific Gravity; Tensile Strength Ratio; Marshall Stability; Hveem Stability and Voids Calculation. Col. 2: 21-27. The patent specifies that applying concrete mix test methodologies can include Unit Weight, Yield, Air Content of Mix; Flexural Strength; Compressive Strength of Cylindrical Concrete Specimens; and Air Content. Col. 2: 30-32. Each of these recitations specifically links the tests given to applying ___ test methodologies. FN3 Therefore, these tests are the methodologies that are being applied in the various corresponding structures.

FN3. The listing of the test methodologies in each category of tests is repeated in col. 4: 26-54 and col. 4: 60-5:20.

But what structure is applying these tests? The patent states that server 100 allows "a consumer to log onto a computerized laboratory analysis software package incorporating AASHTO and ASTM standard test methods for Quality Assurance/Quality Control of soils, aggregates, asphalt, cement asphalt and concrete mixes." Col. 3: 60-64. In the exemplary process provided in FIG. 2, the Plaintiff correctly points to the computation engine that performs the "appropriate engineering calculation" in step 204. Col. 4: 6-8. The patent also specifies that FIG. 3 supports a plurality of test methodologies and incorporates the AASHTO and ASTM standards for test methods that were previously described as included in a software package. Col. 4: 55-59. The patent also reviews the specific tests listed and tells what each "measures" or "covers" in col. 5:21-col. 6:67, though the patent does not specify an algorithm for taking those measurements or accomplishing the tests beyond referring to various AASHTO and ASTM standards.

The Court agrees with the Defendants that the Federal Circuit requires computer-implemented inventions that invoke means-plus-function claiming to disclose more structure in the specification than a general purpose computer. Aristocrat, 521 F.3d at 1333. Here, the patentees claimed application of test methodologies. The specification discloses that the computation engine performs appropriate engineering calculations (col.4:6-8.), but declines to give the algorithms to define what calculations the computation engine performs. The engineering computations are at best established in this patent with reference to the

AASHTO and ASTM standards referenced in col. 5:20-col. 6:67. There was no evidence presented, however, that a person of ordinary skill in the art would understand the references to those standards in the patent to define algorithms. The Federal Circuit has said that the disclosure itself must encompass the software necessary to perform the function, not simply allow one of ordinary skill in the art to write such software. **See** Aristocrat, 521 F.3d at 1337.

Just as in **Aristocrat,** the problem here is that absolutely no algorithm is disclosed, as even the Plaintiff admits. Means-plus-function claiming provides a trade-off between lack of specificity in the claims in exchange for being limited to the structure disclosed in the specification. **See** Aristocrat, 521 F.3d at 1336 ("A section 112 paragraph 6 disclosure, however, serves the very different purpose of limiting the scope of the claim to the particular structure disclosed, together with equivalents."). Because this patent fails to disclose the algorithms necessary to transform a general purpose computer into a special purpose computer programmed to perform the recited functions in these disputed phrases, claims fourteen, sixteen, eighteen, and twenty have not met the disclosure requirements of 35 U.S.C. s. 112 para. 6 and are therefore invalid because they are indefinite under 35 U.S.C. s. 112 para. 2.

IV. CONCLUSION

The Court having now discharged its responsibility with respect to claim construction, a separate Order will be entered governing further proceedings in this case.

SIGNED AND ENTERED this *27th* day of February, 2009.

W.D.Tex.,2009.
Atser Research Technologies, Inc. v. Raba-Kistner Consultants Inc.