

# United States Court of Appeals for the Federal Circuit

2007-1539

PREDICATE LOGIC, INC.,

Plaintiff-Appellant,

v.

DISTRIBUTIVE SOFTWARE, INC.,

Defendant-Appellee.

Christopher S. Marchese, Fish & Richardson P.C., of San Diego, California, for plaintiff-appellant. With him on the brief were Seth M. Sproul and John A. Dragseth of Minneapolis, Minnesota.

John C. Wynne, Duckor Spradling Metzger & Wynne, of San Diego, California, argued for defendant-appellee. With him on the brief was Bernard L. Kleinke.

Appealed from: United States District Court for the Southern District of California

Judge William Q. Hayes

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PREDICATE LOGIC, INC.,

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Defendant-Appellee.

Appeal from the United States District Court for the Southern District of California in case no. 01-CV-1951, Judge William Q. Hayes.

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DECIDED: October 9, 2008

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Before NEWMAN, LOURIE, and LINN, Circuit Judges.

LINN, Circuit Judge.

When the complexities inherent in the English language meet the peculiarities of patent jargon, the result can be the bane of many unsuspecting patentees. While claim language is generally the product of the patentee alone, the patentee's drafting efforts are sometimes aided by the examiner. Usually, such collaborative efforts are constructive. On occasion, however, these efforts result in confusion, not clarity. In this case, there were two such occasions. The first was during the original prosecution—when the patentee authored and the examiner allowed a claim with an arguably ambiguous limitation. The second was during reexamination—when the patentee and the examiner clarified the claim but failed to make an adequate record explaining the rationale for the amendment. Careful and straightforward claim drafting by prosecuting

attorneys and agents, and rigorous application by examiners of the statutory standard to particularly point out and distinctly claim the subject matter regarded to be the invention, see 35 U.S.C. § 112, ¶ 2 (2000), serve an important public notice function. Here, the public notice function was not well served. Indeed, the controversy in this case might have been avoided had the claims been presented differently and accepted by the examiner only after more careful scrutiny.

In this action, Predicate Logic, Inc. (“Predicate”) brought suit against Distributive Software, Inc. (“Distributive”) for infringement of U.S. Patent No. 5,930,798 (the “798 patent”). The ’798 patent relates to measurement and analysis technologies for use in software development. During the litigation, Distributive requested ex parte reexamination of the ’798 patent, and the claims were allowed as amended during reexamination. Distributive then argued to the district court that the asserted claims were invalid because the amendment during reexamination improperly broadened the claims. The district court agreed and granted Distributive’s motion for summary judgment of invalidity. Predicate Logic, Inc. v. Distributive Software, LLC, No. 01-CV-1951, slip op. at 17 (S.D. Cal. Jan. 25, 2007) (“Jan. 25 Op.”); Predicate Logic, Inc. v. Distributive Software, LLC, No. 01-CV-1951, slip op. at 7-8 (S.D. Cal. July 12, 2007) slip op. at 7-8 (“July 12 Op.”). Because we disagree with the district court’s conclusion that the amendment substantively changed the scope of claim 1 of the ’798 patent, we reverse and remand.

## I. BACKGROUND

The ’798 patent discloses a universal data measurement, analysis, and control method that can be used in the software development process. ’798 patent col.3 ll.34-43. Measuring and forecasting the software development process is difficult because

multiple different programming languages may be used on a single project, and each programming language has different metrics. Id. col.1 ll.11-62. For example, in one programming language, the number of lines of code written may be a good metric to track programming progress, while in another programming language, code may not be organized into lines at all. Thus, the “lack of internally consistent data” makes it difficult to measure and forecast software development. Id. col.1 ll.24-28.

The '798 patent attempts to solve this problem with a “universal” system for data measurement and analysis. Id. col.3 ll.34-37. Because software is typically organized hierarchically, the invention of the '798 patent uses a series of pre-defined rules to generate one or more hierarchical indexes that serve as templates for the data to be collected from all of the components of the project. Id. col.3 ll.59-64. The invention then discloses selectively “instantiating” those hierarchical indexes—i.e., populating the index fields with data from the project—and comparing the results of these instantiations. Id. col.3 l.65-col.4 l.5.

Predicate brought suit against Distributive in 2001 alleging infringement of the '798 patent. Jan. 25 Op. at 1. At Distributive’s request, the United States Patent and Trademark Office initiated reexamination of the '798 patent, and the district court stayed the infringement action pending the outcome of the reexamination. Id. at 2. During reexamination, the examiner initially found all claims anticipated by the reference that was the basis for Distributive’s reexamination request, as well as obvious in light of that reference combined with other art. Id. Following a response by Predicate, the examiner withdrew the anticipation rejection but maintained the obviousness rejection. Id. Predicate appealed to the Board of Patent Appeals and Interferences, but the

examiner withdrew the obviousness rejection in light of Predicate's brief to the Board.

Id. Additionally, the examiner issued an "Examiner's Amendment" to claims 1 and 15—the only independent claims of the '798 patent. Id. The examiner did not give any reason for the amendment. Id. The claims as amended were allowed. '798 patent, Reexamination Certificate, col.1 ll.17-18.

The amendment to claim 1 is at issue in this appeal. Claim 1, as amended, is as follows:

1. A method of providing a universal data analysis, measurement and control system for a variety of types of input data components comprising data sets, the method being implemented in a programmed computer comprising a processor, at least one data storage system, at least one input device and at least one output device, the method comprising the steps of:

generating, by means of the programmed computer, at least one hierarchical index linked to each of the input data components, said at least one index being generated under pre-defined formatting rules and further including a description of each of the data sets, each said data set description including at least one quantified description of each data set;

storing said at least one index in at least one of the data storage systems;

[instantiating said at least one index by means of the programmed computer;]

first instantiating at least one said index by means of the programmed computer;

second instantiating at least one said index by means of the programmed computer;

storing said first and second instantiations of [said] at least one said index in at least one of the data storage systems;

comparing at least one of the data sets linked to at least one of said instantiated indexes to at least another of the data sets linked to at least another of said instantiated indexes by means of the programmed computer; and

applying the output of said comparing to at least one of the output devices.

Id. col.1 l.23-col.2 l.10 (brackets indicating deletions and emphasis indicating additions made by amendment).

The infringement action resumed after the conclusion of the reexamination proceeding. Distributive argued that the amendments during reexamination substantively changed the claims and resulted in an improper broadening of claim scope. The district court agreed and found that the '798 patent was substantively changed during reexamination in two respects. Jan. 25 Op. at 17. First, the district court found that the amendment from "said at least one index" to "at least one said index" broadened the scope of claim 1. Id. at 10-13. Second, the district court found that the amendment deleting the "instantiating" step and replacing it with two steps—"first instantiating" and "second instantiating"—substantively changed the claim by narrowing it. Id. at 16. The district court granted summary judgment of invalidity in favor of Distributive. July 12 Op. at 4, 7.

Predicate appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (2000).

## II. DISCUSSION

### A. Amendment of "said at least one index" to "at least one said index"

Under 35 U.S.C. § 305, "[n]o proposed amended or new claim enlarging the scope of a claim of the patent will be permitted in a reexamination proceeding." Claims that are impermissibly broadened during reexamination are invalid, and "a violation of 35 U.S.C. § 305 is an invalidity defense in a patent infringement action." Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1584 (Fed. Cir. 1995). "Whether amendments

made during reexamination enlarge the scope of a claim is a matter of claim construction, which this court reviews de novo.” Creo Prods., Inc. v. Presstek, Inc., 305 F.3d 1337, 1344 (Fed. Cir. 2002).

The district court concluded that shifting of the word “said” in the “instantiating” step of claim 1 broadened the claim’s scope. Jan. 25 Op. at 10, 13. In the claim, the first step of both the original and the amended versions requires “generating . . . at least one hierarchical index.” ‘798 patent, Reexamination Certificate, col.1 ll.30-31. In the original claim, there is an “instantiating” step that requires “instantiating said at least one index.” Id. col.1 l.39 (emphasis added). In the amended claim, each instantiation step requires “instantiating at least one said index.” Id. col.1 l.41, l.43 (emphasis added).

The district court construed “said” to have its ordinary meaning of “aforementioned,” and therefore reasoned that “said at least one index” of the original claim must be the index or indexes that are generated in the “generating” step. Jan. 25 Op. at 11. The district court reasoned that, because the antecedent of “said at least one index” in the “instantiating” step is the “at least one index” generated in the “generating” step, all of the indexes that are generated in the “generating” step must be instantiated in the “instantiating” step. Id. at 12. The district court then concluded that, by contrast, the amended claim language—“instantiating at least one said index”—did not require instantiation of all generated indexes. Id. The district court reasoned that, in the amended claim, “at least one said index” refers to at least one of the indexes generated in the “generating” step, but not necessarily all of the generated indexes. Thus, the district court concluded that, after amendment, “[n]o longer are all of the generated . . . indexes required to be instantiated.” Id. If four indexes are generated in the

“generating” step, only one of those indexes would have to be instantiated in each “instantiating” step. Id. In the district court’s words:

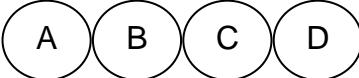
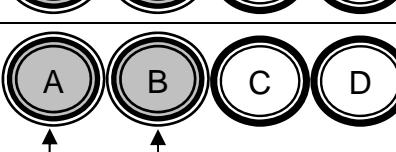
[I]f a third-party’s program generated four indexes, stored four indexes, instantiated only two of those indexes, stored the results of those instantiations and then compared those results, the program would not violate a patent with the terms of original claim 1, but would violate a patent with the terms of amended claim 1. Hence, the amendments to claim 1 broaden the scope of the patent, and therefore constitute a substantive change.

Id. at 13.

In analyzing the breadth of the claim before and after amendment, the district court was correct to ask whether any conceivable process would infringe the amended claim, but not infringe the original claim. See Quantum, 65 F.3d at 1582 n.4 (“The test for determining whether a reexamined claim is broader than an original claim under 35 U.S.C. § 305 is the same as that in 35 U.S.C. § 251, last paragraph, for determining whether reissue claims filed more than two years after issuance of the original patent are broader than the original claims.”); Medtronic, Inc. v. Guidant Corp., 465 F.3d 1360, 1374 (Fed. Cir. 2006) (“A claim of a reissue application is broader in scope than the original claims if it contains within its scope any conceivable apparatus or process which would not have infringed the original patent. A reissue claim that is broader in any respect is considered to be broader than the original claims even though it may be narrower in other respects.” (quoting Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed. Cir. 1999))). But the district court’s analysis in considering its hypothetical infringing process was flawed.

The district court described its hypothetical infringing process as a process that “generated four indexes, stored four indexes, instantiated only two of those indexes,

stored the results of those instantiations and then compared those results.” Jan. 25 Op. at 13. For illustrative purposes, we depict this hypothetical infringing process as follows:

<u>Hypothetical Infringing Process</u>	<u>Illustration</u>
generating four indexes	
storing four indexes	
instantiating only two of those indexes	
storing the results of those instantiations	
comparing the results	

This hypothetical process plainly infringes the amended claim. The “generating . . . at least one hierarchical index” step of the amended claim is met by generating indexes A, B, C, and D. The “storing said at least one index” step is met by storing indexes A, B, C, and D. The “first instantiating at least one said index” step is met by instantiating index A. The “second instantiating at least one said index” step is met by instantiating index B. The “storing said first and second instantiations of at least one said index” step is met by storing the instantiations of indexes A and B. And the “comparing” step is met by comparing the data sets linked with A to the data sets linked with B.

Contrary to the conclusion reached by the district court, the hypothetical process also infringes the original claim. The “generating . . . at least one hierarchical index” step is met by generating indexes A and B. Although the accused process also

generates two additional indexes—C and D—those indexes are extraneous and do not affect the infringement analysis because the claim is an open-ended “comprising” claim. See, e.g., Medicem, S.A. v. Rolabo, S.L., 353 F.3d 928, 933 (Fed. Cir. 2003) (“The transition ‘comprising’ in a method claim indicates that the claim is open-ended and allows for additional steps.” (quoting Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1368 (Fed. Cir. 2003))). The “storing said at least one index” limitation is met by storing indexes A and B—the “said” indexes that were generated in the generating step. Again, the fact that the hypothetical process also stores indexes C and D does not affect the infringement analysis. The “instantiating said at least one index” step is met by instantiating indexes A and B—the “said” indexes that were generated in the generating step. The “storing said instantiation of said at least one index” step is met by storing the instantiations of indexes A and B. And the “comparing” step is met by comparing the data sets linked with A to the data sets linked with B.

Thus, the hypothetical infringing process described by the district court would infringe not only the claim as amended, but also the original claim. The hypothetical process does not demonstrate that the claim was broadened. Moreover, we can imagine no conceivable process—and the parties have identified none—that would infringe the amended claim but would not infringe the original claim. We therefore conclude that the amendment of “said at least one index” to “at least one said index” did not broaden the scope of claim 1.

#### B. Amendment of “instantiating” to “first instantiating” and “second instantiating”

Although our conclusion concerning the shifting of “said” alone requires that we reverse the district court’s grant of summary judgment, we nonetheless address the district court’s conclusion that the amendment of “instantiating” to “first instantiating” and

“second instantiating” was a substantive change. We do so because that issue will continue to be important to the ultimate disposition of the case on remand. See Commonwealth Scientific & Indus. Research Organisation v. Buffalo Tech. (USA), Inc., No. 2007-1449, slip op. at 4 (Fed. Cir. Sept. 19, 2008) (addressing issue of infringement after vacating and remanding on issue of validity, because infringement issue “will continue to be important to the ultimate disposition of the case”).

The district court did not find, and Distributive does not argue, that the amendment of “instantiating” to “first instantiating” and “second instantiating” broadened the scope of claim 1 of the ’798 patent. Rather, the district court found that the amendment effected a “substantive change” by narrowing the claim. Jan. 25 Op. at 16. Under 35 U.S.C. § 307, a claim that is amended in reexamination has the same effect as a claim that is amended in reissue proceedings under 35 U.S.C. § 252. 35 U.S.C. § 307(b) (2000) (“Any proposed amended or new claim determined to be patentable and incorporated into a patent following a reexamination proceeding will have the same effect as that specified in section 252 of this title for reissued patents on the right of any person who made, purchased, or used within the United States, or imported into the United States, anything patented by such proposed amended or new claim, or who made substantial preparation for the same, prior to issuance of a certificate under the provisions of subsection (a) of this section.”). Correspondingly, under 35 U.S.C. § 252, a reissued patent is enforceable against infringing activity that occurred after the issuance of the original patent, “to the extent that its claims are substantially identical” to the claims of the original patent. Thus, “[u]nless a claim granted or confirmed upon reexamination is identical to an original claim, the patent can not be enforced against

infringing activity that occurred before issuance of the reexamination certificate.” Bloom Eng’g Co., Inc. v. N. Am. Mfg. Co., Inc., 129 F.3d 1247, 1250 (Fed. Cir. 1997). “Identical” does not mean verbatim, but means at most without substantive change. . . . An amendment that clarifies the text of the claim or makes it more definite without affecting its scope is generally viewed as identical . . . .” Id.

The district court concluded that the amendment replacing the step of “instantiating said at least one index” with steps of “first instantiating at least one said index” and “second instantiating at least one said index” changed the scope of claim 1. Jan. 25 Op. at 16. Our review is de novo. Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1346-47 (Fed. Cir. 1998).

As the district court correctly pointed out, the original “instantiating” step on its face requires only a single instantiation, whereas the amended “instantiating” steps clearly require two instantiations. Jan. 25 Op. at 14. However, as the district court also acknowledged, the original “comparing” step required “comparing at least one of the data sets linked to at least one of said instantiated indexes to at least another of the data sets linked to at least another of said instantiated indexes. ” ’798 patent col.14 II.17-20 (emphases added). Thus, even in the original claim, the “comparing” step requires two instantiations. This is entirely consistent with the specification’s description of the “instantiating” and “comparing” steps. See id. col.3 l.65-col.4 l.2 (“Once this formatted hierarchical index is created, the index is selectively instantiated at different occasions. The present invention also may include a comparing step, where the indexed data can be compared and analyzed to produce control data, if desired.” (emphasis added)).

Despite the “comparing” step’s requirement of two instantiations, the district court found that the amendment changed the scope of the claim for two reasons. First, the district court reasoned that, in the original claim, only one instantiation might occur during the “instantiating” step, then that instantiation would be compared with a previously stored instantiation, which was generated outside of the claimed process. Jan. 25 Op. at 15. But critically, the “comparing” step does not compare data sets linked to “an instantiated index” with data sets linked to “another instantiated index”; it compares data sets linked to “one of said instantiated indexes” with data sets linked to “another of said instantiated indexes.” The “said instantiated indexes” must be instantiated indexes with an antecedent basis elsewhere in the claim—namely, the indexes that are instantiated during the “instantiating” step. See, e.g., Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1343 (Fed. Cir. 2008) (noting that claim terms using “said” are “anaphoric phrases, referring to the initial antecedent phrase”); see also Jan. 25 Op. at 11 (district court construing “said” to have its ordinary meaning of “aforementioned”). Thus, the district court was incorrect to conclude that the instantiated indexes in the “comparing” step could be indexes other than those generated as part of the claimed process.

Second, the district court reasoned that the “comparing” step might allow a comparison between data sets linked to two different instantiations of the same index, rather than two instantiations of different indexes. Jan. 25 Op. at 15. We agree that in both the original and the amended claim, the “comparing” step permits a comparison between data sets linked to either multiple instantiations of the same index, single instantiations of multiple indexes, or some combination. But the “comparing” step still

requires that at least two instantiations (either of the same index, or of different indexes) be performed, because of the language “one of said instantiated indexes” and “another of said instantiated indexes.” There is nothing in the amended claim that suggests that the “first instantiating” and “second instantiating” steps must be performed on data linked to the same index; likewise, there is nothing in the amended claim that suggests that the “first instantiating” and “second instantiating” steps must be performed on data linked to different indexes. We therefore find the district court’s reasoning unpersuasive.

We conclude that the amendment of the “instantiating” step to the “first instantiating” and “second instantiating” steps did not result in a substantive change to claim 1 of the ’798 patent. The original and amended claims are “identical” for purposes of § 252 and, correspondingly, § 307. See Bloom, 129 F.3d at 1250.

### III. CONCLUSION

For the foregoing reasons, the district court’s grant of summary judgment of invalidity is reversed. We remand for further proceedings consistent with this opinion.

REVERSED and REMANDED