UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TORSTEN JÄKEL

Appeal 2007-4280
Application 09/795,405
Technology Center 2600

Decided: May 21, 2008

Before MAHSHID D. SAADAT, JOHN A. JEFFERY,
and CARLA M. KRIVAK, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claims 1-9. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF CASE

Appellant's claimed invention is a method and apparatus for testing telecommunications facilities independent of the protocol used by analyzing a recorded communication to recognize recurring procedures and generate a test case (Spec. 2:15-17; Spec. 4:11-12).

Independent claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method of testing telecommunication facilities independent of the protocol used comprising the steps of:

a) recording a real communication between at least two telecommunication facilities over an extended period of time;

b) analyzing the recorded real communication to recognize recurring procedures; and

c) generating a test case based on the recurring procedures.

REFERENCES

Womble[1]	US 5,488,648	Jan. 30, 1996
Sasin	US 6,011,830	Jan. 4, 2000

The Examiner rejected claims 1-9 under USC § 103(a) based upon the teachings of Sasin and Womble.

Appellant contends that the combination of Sasin and Womble would not teach that testing is done independent of the protocol used and that real

[1] In the Examiner's Answer mailed March 16, 2007, a new ground of rejection was issued, rejecting the claims under the combination of Sasin and the newly-cited reference to Womble.

communications over an extended time period are recorded and analyzed to recognize recurring procedures (Reply Br. 12).

ISSUE

Did the Examiner err in rejecting claims 1-9 under 35 USC § 103(a) as obvious over Sasin and Womble?

FINDINGS OF FACT

1. Appellant's invention generates test cases that are independent of the protocol being used (cl. 1; Reply Br. 10), analyzes a recorded communication to recognize recurring procedures, and generates a test case based on the recurring procedures (cl. 1).

2. Appellant's disclosure also teaches that an analysis is performed using methods based on protocol (Spec. 5:21-24; Spec. 6:1-2), and more specifically, that it is particularly advantageous if the tester knows the protocol (Spec. 6:12-15).

3. Sasin teaches a test device and method for performing an operational test for a system under test. A test state model is generated from the test system's generated traffic values (the possible states and transitions), from the test commands that have to be issued to the test system to bring about corresponding transitions, and from the system's hardware configuration. "[A] number of test cases with test commands is passed through in exactly the same approach and statistical frequency as is to be expected in a real operating environment…" (col. 11, ll. 52-61).

4. Womble teaches a test diagnostic tool for stored program controlled telecommunications switching systems that capture the

occurrence and timing of "'events' arising from subscriber actions" (Abstract).

5. Womble further teaches that events occurring within the telecommunication switch are recorded and analyzed by an operator to identify and correct any faults that occurred (col. 15, ll. 31-45).

6. "In information technology, a protocol (from the Greek *protocollon*, which was a leaf of paper glued to a manuscript volume, describing its contents) is the special set of rules that end points in a telecommunication connection use when they communicate. Protocols exist at several levels in a telecommunication connection. For example, there are protocols for the data interchange at the hardware device level and protocols for data interchange at the application program level. In the standard model known as Open Systems Interconnection (OSI), there are one or more protocols at each layer in the telecommunication exchange that both ends of the exchange must recognize and observe. Protocols are often described in an industry or international standard." SearchNetwork.com, http://searchnetworking.techtarget.com/sDefinition/0,,sid7_gci212839,00.html (last visited May 19, 2008).

PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). In *KSR*, the Supreme Court reaffirmed that "[t]he combination

of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 1739.

"An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not." *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007).

"[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

Language in a preamble limits a claim where it breathes life and meaning into the claim, but not where it merely recites a "purpose or intended use of the invention." *Innova/Pure Water Inc. v. Safari Water Filtration Systems Inc.*, 381 F.3d 1111 (Fed. Cir. 2004)

If the Examiner's burden of establishing a prima facie case of obviousness is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

ANALYSIS

Claims 1 and 9

The Examiner finds that Sasin teaches all the features of representative claim 1[2] except for recognizing recurring procedures (Ans. 3), and that Womble teaches recognizing a pattern successively repeated in addition to monitoring and analyzing events recorded in a memory. The Examiner then concludes that the claimed invention would have been obvious to a skilled artisan at the time of the invention in view of Sasin and Womble (Ans. 4).

Appellant asserts that the Examiner did not point out that "the testing mechanism of Sasin is 'independent of the protocol used' as is recited in claim 1" (App. Br. 5) and further, that Sasin has to have the protocol identified (Reply Br. 10).[3]) Appellant further asserts that Womble does not teach an "analysis of sequences within the communication for recurring procedures" (Reply Br. 12). Thus, Appellant contends that the combination of these references does not teach testing performed independent of the protocol used or that real communications over an extended period of time are recorded and analyzed to recognize recurring procedures to generate a test case (Reply Br. 12).

The term "independent of the protocol" is found only in the preamble of claim 1; however, the body of the claim is not limited by this term. The

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[2] Appellant argues claims 1 and 9 together and therefore stand or fall together. Accordingly, we select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

[3] We refer to the Substitute Appeal Brief filed June 30, 2006, and the Reply Brief filed May 15, 2007.

term "protocol" as used in telecommunications refers to special set of rules that end points in a telecommunication connection use when they communicate (FF 6). Protocols exist at several levels in a telecommunication connection including at the hardware level and at the application program level (FF 6). Appellant's claims and Specification are not specific as to what protocol the testing is independent. Further, Appellant's own Specification acknowledges that it is advantageous to know the protocol during analysis (FF 2) particularly, "[t]he analysis involves using a target description of a state machine to analyze the communication sequence, i.e., the course of the protocol." (Spec. 5:24-6:2). Therefore, we disagree with Appellant's argument because claim 1 is given its broadest reasonable interpretation in light of the specification, and none of the steps, particularly the step of analyzing the recorded real communication to recognize recurring procedures, is limited by the term "independent of the protocol."

Appellant also argues that Womble does not record over an extended period or recognize recurring procedures, but rather, does so on a call-by-call sequence of events (Reply Br. 12). Appellant asserts a "test case in Womble is not based on the recurring procedures that result from analyzing the data, but rather is based on an anomaly occurring within a sequence of known events." (Reply Br. 12). In Womble, an operator analyzes recorded events to determine if a fault has occurred (FF 5) within the sequence of recorded events (col. 15, ll. 25-28). A fault or failure in this case, is a breaking from a sequence/pattern. Appellant's own Specification only generally describes that there is a repetition of some procedures, such as during connection build-up and connection tear-down. These repetitions

make it possible to recognize recurring procedures. (Spec. 3:23-24; Spec. 4:1-9). Additionally, the analysis of the test includes understanding "errors resulting from active operation…" (Spec. 4:15-16). Thus, Appellant's "recognize recurring procedures" language in claims 1 and 9, refers to analyzing data, including errors/faults occurring within a sequence of events (see also Spec. 2:1-4) as does Womble (col. 15, ll. 23-46). Giving the claims their broadest reasonable interpretation, analyzing the record for a fault (breaking from a sequence/pattern) is reasonably considered as analyzing the record for recurring procedures.

Appellant has not defined what the term "extended period" refers to or means. Giving this term its broadest reasonable interpretation in light of the specification, an extended period can reasonably include a single (long) phone call or many phone calls over a long time period.

We therefore find that Appellant has not persuasively rebutted the Examiner's prima facie case of obviousness and that all the limitations of independent claims 1 are taught or suggested by the collective teachings of the cited prior art. Because claim 9 was not argued separately and therefore stands or falls with claim 1, we find that claim 9 is likewise obvious over the collective teachings of the cited prior art.

Claims 2, 3, and 5-8

Appellant provided no arguments for claims 2, 3, and 5-8. Thus, these claims stand or fall with claim 1 from which they depend. For the reasons provided above, Appellant has not persuaded us of error in the Examiner's rejection of claims 2, 3, and 5-8 over the collective teachings of Sasin and Womble.

Claim 4

Appellant provided arguments for dependent claim 4, which depends from independent claim 1, with respect to Sasin and Mumford (App. Br. 10). However, Appellant provided no rebuttal arguments with respect to the Examiner's rejection of claim 4 based on the collective teachings of Sasin and Womble. Thus, for the reasons provided above with respect to claims 1 and 9, Appellant has not persuaded us of error in the Examiner's rejection of claim 4 over Sasin and Womble.

CONCLUSION

We therefore conclude that the Examiner did not err in rejecting claims 1-9 under 35 U.S.C. § 103(a).

DECISION

The decision of the Examiner rejecting claims 1-9 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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