

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WALTER CANIS, JOHN THOMAS CRONIN, and
DIETER GANTENBEIN

Appeal 2007-3607
Application 09/816,624
Technology Center 2100

Decided: March 31, 2008

Before JOSEPH L. DIXON, JEAN R. HOMERE, and THU A. DANG,
Administrative Patent Judges.

DANG, *Administrative Patent Judge.*

DECISION ON APPEAL

I. STATEMENT OF CASE

Appellants appeal the Examiner's final rejection of claims 1-28 under 35 U.S.C. § 134(a)(2002). We have jurisdiction under 35 U.S.C. § 6(b)(2002).

A. INVENTION

According to Appellants, the invention is a system and method for mapping a network. Specifically, according to Appellants, the invention provides a system and method for identifying network attached devices as well as the details thereof. Under the invention, a collection apparatus having collection tools is communicated with the network. The collection tools are operated to collect information from the devices. The device information is then analyzed to identify details of the devices. Once identified, the details are aggregated into a report (Spec., Abstract).

B. ILLUSTRATIVE CLAIM

Claims 1, 4, and 12 are exemplary and are reproduced below:

1. A system for mapping a network, comprising:

a collection system for collecting device identification and detail information from devices on the network by communicating with each device to retrieve the device identification and detail information, wherein the detail information includes device characteristic information and software information;

a timer system for collecting the device identification and detail information at predetermined scheduled times;

an analysis system for analyzing the collected device identification and detail information; and

a report system for generating a mapping report based on the analyzed device identification and detail information.

4. The system of claim 1, wherein the device identification and detail information includes device identities, device types, device addresses, device characteristics, operating system and application software installed on the devices, and software characteristics of the devices on the network.

12. A method for mapping a network, comprising the steps of:

installing collection tools on a collection apparatus;

communicating with the network using the collection apparatus;

operating the collection tools to collect device identification and detail information from devices on the network by communicating with each device to retrieve the device identification and detail information, wherein the detail information includes device characteristic information and software information;

analyzing the device identification and detail information; and

reporting the analyzed device identification and detail information.

C. REJECTIONS

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Pulsipher	US 5,948,055	Sep. 7, 1999
Steele	US 6,282,175 B1	Aug. 28, 2001

1. Claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pulsipher.

2. Claims 4, 5, 8, 9, 14, 20, 21, 26, and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Pulsipher and Steele.

We affirm-in-part, and we enter a new ground of rejection under 37 C.F.R. § 41.50(b).

II. ISSUES

The issues are whether Appellants have shown that the Examiner erred in finding that

A. Claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 are unpatentable under 35 U.S.C. § 102(b) over the teachings of Pulsipher; and

B. Claims 4, 5, 8, 9, 14, 20, 21, 26, and 27 are unpatentable under 35 U.S.C. § 103(a) over the combined teachings of Pulsipher and Steele.

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Pulsipher

1. Pulsipher discloses a network monitor 306 which transmits and receives data packets to and from a network 118. The network monitor 306 discovers and monitors network topology. The network monitor 306 receives events from other devices in the network 118. Furthermore, the network monitor 306 populates the topology

- database 314 by way of the topology manager 310 and notifies the topology manager 310 of events such as topology changes (col. 7, ll. 41-57).
2. The topology database 314 stores topology data based upon objects, which are used to partition the network for logical reasons. Objects include a network, a computer, a router, etc. The topology data stored with respect to the objects includes an interface or device address, an interface or device type, and interface or device manufacturer, and whether an interface or device supports the SNMP protocol (col. 7, l. 65 to col. 8, l. 6).
 3. Pulsipher implements cooperating management and/or collection stations that can share data, thereby reducing redundant and unnecessary polling (col. 3, ll. 56-59).

Steele

4. Steele discloses a tracking system that uses a revision control system and configuration status gathering to historically track and store configuration changes in computers, wherein the configuration data is gathered from devices on the network selected for monitoring on a periodic basis (Abstract).
5. For monitored computers, the method collects, among other things, configuration information about the operating system, file system, printing and spooling, boot and shutdown, hardware, software, and

- network configurations. For monitored interconnect devices, the method collects, among other things, configuration information about interfaces, IP address routes, static routes, TCP ports, UDP ports, SNMP variables, human and machine readable configuration files, and installed cards (col. 2, ll. 32-40).
6. The collector software collects configuration items at preset collection cycles, normally once a day, by predefining an initial collection time and a frequency, usually daily. Each time a collection occurs, the data base is updated to start the next collection at the last collection time plus the frequency (col. 2, l. 66 to col. 3, l. 4).

IV. PRINCIPLES OF LAW

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

The *claims* measure the invention. See *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). “[T]he PTO gives claims their ‘broadest reasonable interpretation.’” *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). “Moreover, limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)). Our reviewing court

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has repeatedly warned against confining the claims to specific embodiments described in the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). During prosecution before the USPTO, claims are to be given their broadest reasonable interpretation, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969).

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"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). "If a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid under § 103." *KSR*, 127 S. Ct. at 1734.

In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *Id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious. In particular, the Supreme Court emphasized that "the principles laid down in *Graham* reaffirmed the 'functional approach' of *Hotchkiss*, 11 How. 248 [(1850)]." *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)), and reaffirmed principles based on its precedent 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.* The operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

In the absence of separate arguments with respect to claims subject to the same rejection, those claims stand or fall with the claim for which an argument was made. *See In re Young*, 927 F.2d 588, 590 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii)(2004).

V. ANALYSIS

35 U.S.C. § 102(b)

1-3, 6, 7, 11, 17-19, 22-25, and 28

According to the Examiner, "Pulsipher discloses... a timer system for collecting the device identification and detail information at predetermined scheduled times" (Ans. 4), since "Pulsipher discloses the use of polling... which is known to those of ordinary skill as a mechanism used by a

computer to actively check the status of an input or another device to see if an event external to the computer has been registered at some predetermined time interval between checks” (Ans. 13-14). However, Appellants contend that “the Pulsipher network monitor is a continuously running monitor that issues events if it detects or is notified of a topology change and not a system that monitors system topology only at predetermined scheduled times” (Br. 9). We agree with Appellants.

While Pulsipher discloses a monitoring system which transmits and receives data packets to and from a network (FF 1-2), we find that Pulsipher does not disclose a polling system. Instead, Pulsipher discloses a monitoring system that implements cooperating management and/or collection stations to share data, *for reducing redundant and unnecessary polling* (FF 3).

As such, we reverse the rejection of representative claim 1 and claims 2, 3, and 6 depending therefrom over Pulsipher. As for rejection of claims 7, 11, 17-19, 22-25, and 28, because all the claims include the timer feature, as discussed *supra*, the rejections of claims 7, 11, 17-19, 22-25, and 28 are also reversed.

Therefore, we will not sustain and will instead reverse the Examiner’s rejection of claims 1-3, 6, 7, 11, 17-19, 22-25, and 28 under 35 U.S.C. § 102 for the reasons as set forth above.

Claims 12, 13, 15, and 16

Because claims 12, 13, 15, and 16 do not share the feature surrounding a timer, claims 12, 13, 15, and 16 do not stand with claims 1-3, 6, 7, 11, 17-19, 22-25, and 28 discussed above.

Appellants argue that “the network topology of Pulsipher is not taught as having both device identification and detail information, wherein the detail information includes device characteristic information and software information” (App. Br. 7-8).

We disagree. The Examiner’s position as to Pulshipher disclosing the claimed elements on appeal beginning at page 4 of the Answer and the Examiner’s corresponding responsive arguments beginning at page 10 of the Answer appear to us to meet all of the limitations required by the claims on appeal.

As the Examiner found, the term “detail information” cannot be confined to a specific embodiment. Appellants’ claims simply do not place any limitation on what the “detail information” is to be, to represent, or to mean, other than that the detail information includes device characteristic information and software information. Appellants’ argument that the information in Pulsipher is not a “detail information” because “the network topology of Pulsipher is not taught as having... device characteristic information (e.g. how much RAM a workstation currently has) and software information (e.g., that workstation A has Microsoft WordTM and/or the software version)” is not commensurate with the invention that is claimed.

That is, Appellants appear to be arguing that because Pulsipher discloses network topology, Pulsipher does not disclose detail information which includes information regarding how much RAM a workstation has and whether the work station has Microsoft WordTM, which is not commensurate with the claimed invention.

Pulsipher discloses a network monitor which transmits and receives data packets to and from a network, wherein the topology data stored with respect to the objects includes an interface or device address, an interface or device type, and interface or device manufacturer, and whether an interface or device supports the SNMP protocol (FF 1-2). We agree with the Examiner that such topology data of Pulsipher is “detail information.”

Appellants further argue that “Pulsipher does not collect information in the same manner as in the claimed invention” because “Pulsipher simply receives information as it is passed through the network and does not *retrieve* information from the devices in the network” (App. Br. 10). However, such argument that “Pulsipher does not collect information in the same manner” also is not commensurate with the claimed invention.

The Examiner’s position as to Pulsipher disclosing the claimed “retrieve” limitation of the claims, beginning at page 4 of the Answer and the Examiner’s corresponding responsive arguments beginning at page 14 of the Answer, appear to us to comply with the requirements of the above-noted case law.

Pulsipher discloses a network monitor which transmits and receives data packets to and from a network, wherein the network monitor discovers and monitors network topology and the topology data stored includes data as to whether an interface or device supports the SNMP protocol (FF 1-2). As admitted by Appellants in the Appeal Brief at 9, Pulsipher implements collection stations that can share data (FF 3). We agree with the Examiner that the collection action of Pulsipher is a “retrieve” action. That is, Pulsipher does not merely inactively receive the data but rather actively monitors and collects the data.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in finding that Pulsipher discloses the claimed elements of claim 12.

As to the other recited elements of claim 12, Appellants provide no argument to dispute that the Examiner has correctly shown where all these claimed elements appear in the prior art. Thus, we deem those arguments waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).

Appellants do not provide a separate argument for claims 13, 15, and 16, depending from claim 12, and thus, claims 13, 15, and 16 fall with claim 12.

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claims 12, 13, 15, and 16 under 35 U.S.C. § 102(b).

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35 U.S.C. § 103(a)

Claims 4, 5, 8-10, 14, 20, 21, 26, and 27

As to claims 4, 5, 8-10, 14, 20, 21, 26, and 27, the Examiner found that “Pulsipher discloses the system... wherein the device identification and detail information includes device identity, device address, device characteristics, software installed on the devices, and software characteristics of the devices on the network” (Ans. 8).

The Examiner further found that “Steele discloses wherein device identification and detail information includes operating system software installed on the devices,” (Ans. 8) and that “one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings” (Ans. 9).

As discussed above concerning the rejection of claims 12, 13, 15, and 16 under 35 U.S.C. § 102(b), we agree with the Examiner that Pulsipher discloses the claimed limitations of a collecting device for that retrieves device identification and detail information, wherein the detail information includes device characteristic information and software information (FF 1-3). Further, as the Examiner found, Steele discloses that the information collected may include configuration information about the operating system (FF 4-5).

Steele also discloses that the collector software collects configuration items at preset collection cycles, normally once a day, by predefining an initial collection time and a frequency, usually daily (FF 6). We find the collection time and frequency as disclosed by Steele, to be a “predetermined scheduled times” for collecting detail information.

We agree with the Examiner that one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous art.

Appellants argue that “a combination of Pulsipher and Steele as proposed by the Office would not function in such a manner as to provide the Pulsipher network monitor with operating system function (App. Br. 11-12).

The Examiner’s reasoning of combinability beginning at page 9 of the Answer, as discussed above, and the Examiner’s corresponding responsive arguments beginning at page 15 of the Answer appear to us to comply with the requirements of the above-noted case law. Moreover, we generally agree with the Examiner’s observations that Pulsipher and Steele are analogous art. Both Pulsipher and Steele disclose a data monitoring system (FF 1-6). Pulsipher discloses a network monitor which transmits and receives data packets to and from a network (FF 1-2). Further, Steele discloses that the information collected may include configuration information about the operating system (FF 4-5).

Incorporating Steele's configuration information about the operating system into Pulsipher's monitoring process does not change the function of either Pulsipher's monitoring process or Steele's monitoring process. Rather, as the Examiner found, Pulsipher's monitoring process is merely extended to include further collecting information concerning the operating system to allow identification of what has changed in the configuration of a computer which aids in troubleshooting and management of a computer system network. The combination yields an expected result of monitoring by using the configuration information about the operating system.

Appellants have provided no evidence that incorporating Steele's configuration information about the operating system into Pulsipher's monitoring process was "uniquely challenging or difficult for one of ordinary skill in the art," *Leapfrog*, 485 F.3d at 1162, nor have Appellants presented evidence that this incorporation yielded more than expected results. "[W]hen a patent 'simply arranges old elements with each performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious." *KSR*, 127 S. Ct. at 1739 (citing *Sakraida v. AG Pro, Inc.*, 425 U. S. 273, 282 (1976)).

Accordingly, we conclude that the Appellants have not shown that the Examiner erred in rejecting claim 4 under 35 U.S.C. § 103(a). Because Appellants do not provide separate arguments for claims 5, 8-10, 14, 20, 21, 26, and 27, claims 5, 8-10, 14, 20, 21, 26, and 27 fall with claim 4.

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We conclude that Appellants have not shown that the Examiner erred in rejecting claims 4, 5, 8-10, 14, 20, 21, 26, and 27 under 35 U.S.C. § 103(a) over Pulsipher and Steele.

Claims 1-3, 6, 7, 11-13, 15-19, 22-25, and 28

Claims 4-5, 8-10, 14, 20, 21, 26, and 27, depend from independent claims 1, 7, 12, 17, and 23, respectively. Accordingly, dependent claims 4-5, 8-10, 14, 20, 21, 26, and 27 respectively include all the claimed limitations of independent claims 1, 7, 12, 17, and 23, and thus, independent claims 1, 7, 12, 17, and 23 are also unpatentable under 35 U.S.C. § 103(a) over Pulsipher and Steele.

Because claims 2, 3, and 6 fall with claim 1, claim 11 falls with claim 7, claims 13, 15, and 16 fall with claim 12, claims 18, 19, and 22 fall with claim 17 and claims 24, 25, and 28 fall with claim 23, we conclude that claims 2, 3, 6, 11, 13, 15, 16, 18, 19, 22, 24, 25, and 28 are also unpatentable under 35 U.S.C. § 103(a) over Pulsipher and Steele.

NEW GROUND OF REJECTION

Using our authority under 37 C.F.R. § 41.50(b), we reject claims 1-3, 6, 7, 11-13, 15-19, 22-25, and 28 under 35 U.S.C. § 103 over the combination of Pulsipher and Steele for the reasons set forth in the preceding paragraph.

37 C.F.R. § 41.50(b)

37 C.F.R. § 41.50(b) provides that, “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the Appellants, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of appeal as to the rejected claims:

- (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner ...
- (2) *Request rehearing.* Request that the proceeding be reheard under 37 C.F.R. § 41.52 by the Board upon the same record ...

CONCLUSIONS OF LAW

(1) Appellants have shown that the Examiner erred in finding that claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 are unpatentable over the teachings of Pulsipher.

(2) Appellants have not shown that the Examiner erred in finding claims 4, 5, 8, 9, 14, 20, 21, 26, and 27 are unpatentable over the teachings of Pulsipher and Steele.

(3) Claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 are unpatentable over the combined teachings of Pulsipher and Steele.

(4) Claims 1-28 are not patentable.

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DECISION

We reverse the Examiner's rejection of claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 under 35 U.S.C. § 102(b). However, we affirm the Examiner's rejection of claims 4, 5, 8, 9, 14, 20, 21, 26, and 27 under 35 U.S.C. § 103(a).

Further, we reject claims 1-3, 6, 7, 10-13, 15-19, 22-25, and 28 under 35 U.S.C. § 103(a).

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 IN PART

37 C.F.R. § 41.50(b)

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