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Datasheet for the decision of 14 February 2013

Case Number: T 0930/10 - 3.5.05

Application Number: 00123523.3

Publication Number: 1096724

IPC: H04L12/24

Language of the proceedings: EN

Title of invention:
Method and system for monitoring computer networks and equipment

Applicant:
American Power Conversion Corporation

Headword:
Monitoring of environmental data/AMERICAN POWER

Relevant legal provisions:
EPC Art. 56
RPBA Art. 12(4), 13(1)

Keyword:
Inventive step - main, first to third auxiliary requests (no)
Admission - fourth auxiliary request (no)
Reimbursement of appeal fee - (no)

Decisions cited:

Catchword:

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Case Number: T 0930/10 - 3.5.05

D E C I S I O N
of the Technical Board of Appeal 3.5.05
of 14 February 2013

Appellant: (Applicant)	American Power Conversion Corporation 132 Fairgrounds Road West Kingston, RI 02892 (US)
Representative:	Mintz Levin Cohn Ferris Glovsky and Popeo LLP Alder Castle 10 Noble Street London EC2V 7JX (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted 23 December 2009 refusing European patent application No. 00123523.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair: A. Ritzka
Members: K. Bengi-Akyuerek
F. Blumer

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division, posted on 23 December 2009, refusing European patent application No. 00123523.3 on the ground of lack of inventive step (Article 56 EPC) with respect to a main request, having regard to the disclosures of

D1: US-A-5 955 946 and
D5: JP-A-11109933,

and on the ground of lack of clarity (Article 84 EPC) with respect to a first auxiliary request. In an *obiter dictum* under the heading "Additional Remarks" of the decision under appeal, it was further held that the first auxiliary request also lacked an inventive step (Article 56 EPC) in view of D1 and D5.

II. Notice of appeal was received on 23 February 2010. The appeal fee was paid on the same day. With the statement setting out the grounds of appeal, received on 23 April 2010, the claims corresponding to the main request of the first-instance proceedings (claims 1 to 41) were re-submitted as a sole request. The appellant requested that the decision of the examining division be set aside and that a patent be granted on the basis of the sole request. In addition, reimbursement of the appeal fee was requested based on an alleged "gross procedural violation" committed by the examining division. Also, oral proceedings were requested as an auxiliary measure.

III. A summons to oral proceedings scheduled for 14 February 2013 was issued on 16 November 2012. In an annex to this summons, the board gave its preliminary opinion on the appeal pursuant to Article 15(1) RPBA.

In particular, objections were raised under Article 52(1) EPC in conjunction with Article 56 EPC, mainly having regard to the disclosures of D1 and

D3: WO-A-99/15950.

Furthermore, the appellant was also informed that, regardless of whether the appeal was considered allowable or not, the requested reimbursement did not seem to be equitable by reason of a substantial procedural violation under Rule 103(1)(a) EPC.

IV. By letter of reply dated 14 January 2013, the appellant submitted amended claims according to a main request and first to fourth auxiliary requests, and requested that a patent be granted on the basis of the main request or any of those auxiliary requests.

V. Oral proceedings were held as scheduled on 14 February 2013, during which all the pending requests were discussed. The appellant finally requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or any of the first, second, third and fourth auxiliary requests, all requests as filed with letter dated 14 January 2013. The appellant further requested that the appeal fee be reimbursed.

At the end of the oral proceedings, the decision of the board was announced.

VI. Claim 1 of the main request reads as follows:

"A self-contained, stand-alone monitoring device for monitoring a space (10) and its contents (12) over a network when said device is located in said space (10),

said device being characterised by comprising:

one or more sensors (54,60,62,84,86) configured to detect one or more physical parameters of the space (10) and to generate one or more sensor signals representative of said detected physical parameters;

an analog-to-digital converter (66) coupled to one or more of said sensors (54,60,62,84,86), said analog to digital converter (66) being configured to convert sensor signals to a digital format and to output corresponding digital signals;

a microprocessor (72) for providing processing and network connectivity capability, the microprocessor being coupled to said analog-to-digital sensor (66) for the receipt of said digital signals, said microprocessor (72) being configured to process said digital signals to generate monitoring status information and to generate an alarm signal if any of the one or more physical parameters exceeds a corresponding threshold value, wherein the microprocessor (72) is configured to execute a web server application (100), said microprocessor (72) and said web server application (100) combining to provide a micro web-server that is operable to generate a webpage that is accessible from a remote location via the internet, said microprocessor (72) being operable to populate said webpage with said monitoring status information;

one or more memory modules (68,70) coupled to the microprocessor (72) and configured to store said web-server application and said monitoring status information;

a network based interface (74,76) for providing information from the network to the microprocessor (72) and for providing access to said webpage via said network;

at least one input/output port (80,82) coupled to

the interface (74,76) and configured to interface the device with the network; and

a power source (78) for powering the device."

Claim 1 of the first auxiliary request comprises all the features of claim 1 of the main request and further adds that all the components of the claimed monitoring device are provided within a housing of said device.

Claim 1 of the second auxiliary request comprises all the features of claim 1 of the first auxiliary request and further adds that the microprocessor and web server application combine to provide "a micro web-server with its own URL and static IP address".

Claim 1 of the third auxiliary request comprises all the features of claim 1 of the second auxiliary request and further adds that "said micro web-server additionally being configured to generate an HTML form that includes entry fields for device configuration settings so that a user can program said device and adjust threshold values from a remote location via the internet".

Claim 1 of the fourth auxiliary request comprises all the features of claim 1 of the third auxiliary request with the addition of "at least one of said sensors being a smoke alarm sensor (84) for generating an alarm signal upon the detection of an audible smoke alarm".

Reasons for the Decision

1. Admissibility of the appeal

The appeal complies with the provisions of Articles 106

to 108 EPC (cf. point II above) and is therefore admissible.

2. MAIN REQUEST

This request differs from the main request underlying the appealed decision basically in that claim 1 as amended is now directed towards a "self-contained, stand-alone monitoring device" rather than to a "system". This amendment is, in particular, supported by the disclosures of page 8, lines 3-5; page 11, lines 3-5, and Fig. 7 of the application as filed.

For the purpose of assessing novelty and inventive step, the "self-contained, stand-alone monitoring device" is interpreted as a monitoring device which has all that is needed for its proper functioning in itself (cf. applicant's first-instance reply letter dated 27 October 2009, page 4, second paragraph).

2.1 Article 52(1) EPC: Novelty and inventive step

In the board's judgment, claim 1 of this request does not meet the requirements of Articles 52(1) and 56 EPC, for the following reasons:

2.1.1 The board concurs with the examining division in considering D1 as the closest prior art, since D1 is related to the same technical purpose as the present invention, namely the remote monitoring of environmental parameters using threshold-based alarm messages.

More specifically, it discloses a monitoring device (i.e. "alarm/facility management unit, AMU") for monitoring the environmental conditions of a certain

location via different sensors and subsequently reporting the retrieved monitoring data to a remote administrator (i.e. "Network Operations Center, NOC") via protocol-specific network management messages ("SNMP messages") and configuration pages based on the well-known Openview™ system (see column 5, lines 35-43 and Fig. 7). Furthermore, the alarm/facility management unit of D1 represents a self-contained, stand-alone monitoring device, since it contains all the relevant hardware and software components for its proper functioning as a device for monitoring environmental data of a certain space (see e.g. column 7, line 8 to column 8, line 15).

2.1.2 The board also agrees with the finding of the decision under appeal that the difference between the subject-matter of claim 1 and the disclosure of D1 is seen to be that the microprocessor of the claimed monitoring system is further configured to execute a web server application for providing a micro web-server being operable to generate a web page that is accessible from a remote location via the Internet and to populate said web page with monitoring status information.

Hence, the subject-matter of claim 1 of this request is considered to be novel over the cited prior art (Article 54 EPC).

2.1.3 According to the appealed decision (section II.1.2), the system of claim 1 addressed the following partial problems:

I. the problem of monitoring physical conditions in a space; and

II. the problem of providing a way of presenting information via the Internet.

Firstly, the board concurs with the appellant in that the objective technical problem as formulated by the examining division does not happen to be adequate since partial problem I is not related to a distinguishing feature, while partial problem II contains a pointer (i.e. "via the Internet") to its solution.

Rather, the objective problem to be solved by claim 1 is regarded as being how to provide access and control of monitored data through another global network (cf. page 3, lines 15-17; page 4, lines 34-36, and page 5, lines 10-12 of the original application), i.e. to provide an alternative to the commercial Openview™ system used in D1 (cf. minutes of the oral proceedings before the examining division, item 41 and statement setting out the grounds of appeal, section 2.9).

2.1.4 Starting from the teaching of D1, in which an SNMP-based monitoring of physical parameters is performed via the Openview™ system and a page comprising monitoring status information (i.e. "Alarm Events window 50" in Fig. 12) is generated and accessed from a remote location via a WAN system (see e.g. column 9, lines 20-23; Figs. 3 and 7), the person skilled in the art would be aware of the fact that this type of remote monitoring could be also applied to any global network or WAN.

When confronted with the above objective problem, the skilled person in the field of network-based monitoring would thus consider the use of less expensive and/or widely available networks as an alternative to the system of D1. Consequently, when consulting the prior art, the skilled person would, for example, come across document D3, in which a web-based network management

system based on remote monitoring of network events via HTML pages and alarm messages is described. More specifically, D3 discloses the distinguishing feature related to the use of a web server for generating a web page that is accessible from a remote location via the Internet and populated with monitoring status information (see page 10, line 33 to page 11, line 11; page 12, line 27 to page 13, line 3; Figs. 2 and 4).

As a result, the skilled person would readily apply the web-based approach of D3 to the system of D1 by replacing the apparently more expensive and complex Openview™ system using general networks and monitoring screens by a web server using the Internet and generating accessible HTML-based monitoring pages in order to solve the above-identified objective problem. In other words, the skilled person in the field of network-based monitoring would plainly replace the application-layer protocol SNMP used in D1 by the more widely used application-layer protocol HTTP. In doing so, the person skilled in the art would arrive at the subject-matter of claim 1 in an obvious manner.

2.1.5 The appellant argued that the AMU of D1 could not be considered as a self-contained, stand-alone monitoring device as claimed, since it did not comprise sensors for detecting environmental parameters at a certain location. Rather, the AMU represented an accumulator which gathers all the environmental data detected by sensors placed at separate, remote locations, in particular, based on the disclosures of column 4, lines 31-33 and column 7, lines 53-55 of D1.

However, D1 clearly evidences that the AMU contains individual sensors for detecting environmental data in terms of temperature and humidity information at its

location, i.e. *in situ* (see e.g. column 4, lines 33-37 and column 7, lines 55-59: "... The alarm/facility management unit 10 includes two environmental sensors for continuously monitoring temperature and relative humidity to determine if conditions are within pre-set thresholds ...") and therefore may palpably regarded as a self-contained, stand-alone monitoring device as claimed. In this context, the board also notes that the term "remote location" with regard to the above cited passages of D1 refers to a location being remote from the central operator (i.e. "NOC") rather than from the AMU according to a linguistically and technically consistent interpretation of the teaching of D1.

2.1.6 Furthermore, the appellant also submitted that D3 could not be combined with D1 to arrive at the subject-matter of claim 1, because it was not related to the monitoring of environmental data of a certain space. However, D3 is cited as evidence of web-based (rather than SNMP-based) alarm management systems in the relevant field of network-based monitoring (cf. point 2.1.4 above), independent of which data are actually monitored.

2.1.7 In view of the above, the subject-matter of claim 1 of this request does not involve an inventive step having regard to the combined teaching of D1 and D3.

2.2 In conclusion, this request is not allowable under Article 56 EPC.

3. FIRST AUXILIARY REQUEST

This request differs from the main request in that claim 1 as amended further specifies that all the components of the claimed monitoring device are

provided within a housing of said device. This amendment is based on Fig. 1 and claim 1 of the application as filed.

3.1 Article 52(1) EPC: Novelty and inventive step

The board holds that D1 also discloses the feature of providing all components of the claimed monitoring device within a housing as claimed (see e.g. column 5, lines 43-45). Consequently, the observations concerning the main request set out in point 2.1 with regard to the distinguishing feature, the objective problem, and the argumentation on obviousness apply *mutatis mutandis* to claim 1 of this request. Hence, the subject-matter of claim 1 of this request does not involve an inventive step having regard to D1 and D3.

3.2 In conclusion, this request is not allowable under Article 56 EPC either.

4. SECOND AUXILIARY REQUEST

This request differs from the first auxiliary request in that claim 1 as amended further specifies that the micro web-server has its own URL and static IP address. That amendment is based on the disclosure of page 8, lines 11-13 of the application as filed.

4.1 Article 52(1) EPC: Novelty and inventive step

The board considers that D1 also discloses the use of a static IP address associated with the AMU (see e.g. Figs. 10 and 13) while D3 anticipates the use of URL addresses related to a web server (see e.g. page 20, line 32 to page 21, line 3). Therefore, the observations concerning the main request set out in

point 2.1 with regard to the distinguishing feature, the objective problem, and the argumentation on obviousness apply *mutatis mutandis* to claim 1 of this request. Hence, the subject-matter of claim 1 of this request does not involve an inventive step having regard to D1 and D3.

4.2 In conclusion, this request is not allowable under Article 56 EPC either.

5. THIRD AUXILIARY REQUEST

This request differs from the second auxiliary request in that claim 1 as amended further specifies that the micro web-server is additionally configured to generate an HTML form that includes entry fields for device configuration settings so that a user can program said device and adjust threshold values from a remote location via the internet. That amendment is essentially based on the disclosures of page 8, lines 23-25; page 21, lines 18-22; page 22, lines 6-12, and Figs. 17 and 18 of the application as filed.

5.1 Article 52(1) EPC: Novelty and inventive step

The board finds that D1 discloses the use of a form including entry fields for setting threshold values associated with the AMU (see e.g. Fig. 7) while D3 discloses the use of an event monitor for configuring alarm thresholds related to a web server (see e.g. page 31, lines 10-13 and page 32, lines 13-20). Hence, the observations concerning the main request set out in point 2.1 with regard to the distinguishing feature, the objective problem, and the argumentation on obviousness apply *mutatis mutandis* to claim 1 of this request. Therefore, the subject-matter of claim 1 of

this request does not involve an inventive step having regard to D1 and D3.

5.2 In conclusion, this request is not allowable under Article 56 EPC either.

6. FOURTH AUXILIARY REQUEST

This request differs from the third auxiliary request in that claim 1 as amended further specifies that at least one of said sensors is a smoke alarm sensor for generating an alarm signal upon the detection of an audible smoke alarm.

6.1 Admission into the proceedings

The board decided not to admit this request into the appeal proceedings under Articles 12(4) and 13(1) RPBA, the reasons being as follows:

6.1.1 This request was submitted for the first time in response to the summons to oral proceedings before the board, i.e. at a relatively late stage of the procedure, and comprises amendments to the claims, taken from the former claims (i.e. claim 41 as filed), which further limit the underlying subject-matter in scope. However, the added feature shifts the focus to an additional technical problem to be solved (i.e. how to detect fire alarms without any cabling, as formulated by the appellant) which had not been discussed in the first-instance proceedings.

Furthermore, the added feature gives rise to added subject-matter, since the application as filed (cf. Fig. 7, where the "smoke detector 84" is not included in the housing of the monitoring device, as opposed to

the temperature, humidity, and air-flow sensors) does not directly and unambiguously disclose that the smoke alarm sensor is provided within said housing as claimed (cf. claim 1, lines 5-9). Consequently, this request may not be considered as clearly allowable under Article 123(2) EPC.

6.2 In view of the above, the board decided to exercise its discretionary power not to admit the request into the appeal proceedings under Article 12(4) and 13(1) RPBA.

7. Reimbursement of appeal fee (Rule 103 EPC)

The appellant further requested the reimbursement of the appeal fee based on an alleged "gross procedural violation" committed by the examining division infringing the right to be heard under Article 113(1) EPC (cf. statement setting out the grounds of appeal, section 1).

However, since the board does not deem the present appeal to be allowable, the appeal fee cannot be reimbursed under Rule 103(1)(a) EPC for this reason alone.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz A. Ritzka

Decision electronically authenticated