



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
12/429,881 04/24/2009 Philip John Kaufman 09AB089-US 1948

42982 7590 03/28/2016
Rockwell Automation, Inc./FY
Attention: Linda H. Kasulke E-7F19
1201 South Second Street
Milwaukee, WI 53204

Table with 1 column: EXAMINER

ARAQUE JR, GERARDO

Table with 2 columns: ART UNIT, PAPER NUMBER

3689

Table with 2 columns: NOTIFICATION DATE, DELIVERY MODE

03/28/2016

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

howell@fyiplaw.com
docket@fyiplaw.com
raintellectualproperty@ra.rockwell.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PHILIP JOHN KAUFMAN and MARCIA ELAINE WALKER

Appeal 2014-001040
Application 12/429,881¹
Technology Center 3600

Before HUBERT C. LORIN, KENNETH G. SCHOPFER, and
AMEE A. SHAH, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Philip John Kaufman, et al. (Appellants) seek our review under 35 U.S.C. § 134 of the final rejection of claims 1, 4–12, 15–17, and 19–23. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE.

¹ The Appellants identify Rockwell Automation Technologies, Inc., as the real party in interest. App. Br. 2.

THE INVENTION

Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. An energy demand management and services system, comprising:

at least one processor coupled to memory retaining instructions carried out by the processor, in operation, for:

an acquisition component that, in operation, obtains at least one utilization data element initially generated in an industrial automation controller via a communication network, wherein the utilization data elements are instances of discrete data pertaining to at least one of sustainability, energy consumption, or emissions by at least one of manufacturing elements or facility elements, and wherein the utilization data elements include various granularities of data types represented therein;

an analysis component that, in operation, employs the utilization data elements to at least one of forecast the sustainability, energy consumption, or emissions, determine at least one trend for the sustainability, energy consumption, or emissions, or identify logical data relationships for the sustainability, energy consumption, or emissions;

an optimization component that generates and automatically implements at least one suggestion for improving sustainability, reducing energy demand, or reducing emissions based on at least one of the utilization data elements, forecasts, trends, or logical data relationships; and

an interface component that, in operation, displays representations of at least one of the utilization data elements, forecasts, trends, or relationships.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Or	US 2002/0178047 A1	Nov. 28, 2002
Amaratunga	US 2003/0061091 A1	Mar. 27, 2003

The following rejections are before us for review:

1. Claims 1, 4, 5, 7, 10–12, 15, 21, and 22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Or.
2. Claims 6, 8, 9, 16, 17, 19, 20, and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Or and Amaratunga.

ISSUES

Did the Examiner err in rejecting claims 1, 4, 5, 7, 10–12, 15, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Or?

Did the Examiner err in rejecting claims 6, 8, 9, 16, 17, 19, 20, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Or and Amaratunga?

ANALYSIS

The rejection of claims 1, 4, 5, 7, 10–12, 15, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Or.

The independent claims 1 and 11 include the limitations “wherein the utilization data elements include various granularities of data types represented therein” and “wherein the discrete data elements include various granularities of data types represented therein,” respectively, the data elements generated in or originating in an industrial automation controller and pertaining or related to at least one of sustainability, energy consumption, or emissions.

The Examiner’s position as to said limitations is reproduced below.

In regards to **claim 1**, Or discloses an energy demand management and services system, comprising:

....

an acquisition component, in operation, that obtains at least one utilization data initially generated in an industrial automation controller element via a communication network, wherein the utilization data elements are instances of discrete data pertaining to at least one of sustainability, energy consumption, or emissions by at least one of manufacturing elements or facility elements, wherein the utilization data elements include various granularities of data types represented therein (see at least Page 2 ¶ 16 wherein a computer software system is provided for collecting information via a communication network pertaining to at least one of sustainability, energy consumption, or emissions by at least one of manufacturing elements or facility elements. Moreover, Or in ¶ 16 discloses that the computer software program begins the process by first obtaining the utilization data received from the energy sensors before it begins to analyze it. According to ¶ 24 of the applicant's PGPub specification, the utilization data elements represent discrete instances of discrete data pertaining to sustainability, energy consumption, and/or emissions by manufacturing and/or facility elements. With that said, the Examiner asserts that Or does, indeed, teach that utilization data is initially generated in the controller since it must first be obtained and generated before it can be analyzed and that the received data is, indeed, discrete data since the data pertains to sustainability, energy consumption, and/or emissions by manufacturing and/or facility elements. As far as the Examiner is concerned the claimed "discrete data" is equivalent to the data of Or.

Moreover, the Examiner notes that the industrial automation controller is outside the scope of the system in that it is not part of the system. The claim calls for an acquisition component that obtains utilization data and, as a result, where the data is received from does not matter or affect how the claimed invention is carried out or functions. In other words, the controller is not part of the system but simply a source of information that can be substituted for almost anything that provides utilization data elements.

Although not required, the Examiner has still provided evidence that Or teaches this feature. As discussed in MPEP 2111.04 "Claim scope is not limited by claim language that suggests or make optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure."

In summary, the data that is being provided by the sensors of Or are, indeed, equivalent to the claimed utilization data elements because 1) as disclosed in the specification and in Or the data is directed towards instances of energy consumption; and 2) the data collected by Or is data that conveys to the analysis system on instances of energy consumption which pertain to at least one of sustainability (Page 2 ¶ 17 regarding analysis on how to minimize excessive energy usage, i.e. optimization), energy consumption (Page 3 ¶ 17, 26 how much energy, electrical, gas, or the like, that the system is using). The Examiner asserts that this information is, indeed, acquired or obtained by an acquisition system (analysis system of Or) and is initially generated by an industrial automation controller element, i.e. sensors and energy consumption gathering units of Or that transmit the information to the analysis system.)

Final Act. 2–4. The Examiner takes the same position as to claim 11.

The requirement set forth in the claims that the data elements “include various granularities of data types represented therein” does not appear to have been addressed.

In response to the Appellants’ arguments, the Examiner states:

In regards to:

"wherein the utilization data elements include various granularities of data types represented therein"

the Examiner asserts that this does not provide sufficient recitation to differentiate the claimed invention from the prior art. Specifically, the specification on **Page 6 ¶ 24** discloses:

"The utilization data elements 104 can have most any suitable granularity for the data types or types represented, and can contain a plurality of elements having various granularities. **For**

example, the utilization data elements 104 can represent energy consumption for a set (e.g., batch, lot, etc.) of elements."

As a result, referring to the example provided above, information pertaining to the energy consumption of an HVAC system is, indeed, data that includes granular data types. That is to say, **Or** discloses that sensors transmit data to the analysis system about the amount of energy, for example electricity, that the HVAC system consumes. With that said, one of ordinary skill in the art of energy consumption for an HVAC system would have found that that data that describes how much energy is being consumed needs to be provided in a granular format, e.g., kWhr, or in the example found on **Page 3 ¶ 26 of Or** cubic feet in order to determine how much gas a system is using in order to determine whether electrical usage, e.g., kWhr, should be used in order to save energy or money. The Examiner asserts that **Or** inherently conveys this information or data from the sensors to the analysis system in various granularities in order to accurately convey to the analysis system the actual performance or usage of a particular system. To put it yet another way, the data that is being provided by the sensors of **Or** are, indeed, equivalent to the claimed utilization data elements because 1) as disclosed in the specification and in **Or** the data is directed towards instances of energy consumption; and 2) the data collected by **Or** is data that conveys to the analysis system on instances of energy consumption which pertain to at least one of sustainability (**Page 2 ¶ 17 regarding analysis on how to minimize excessive energy usage, i.e. optimization**), energy consumption (**Page 3 ¶ 17, 26 how much energy, electrical, gas, or the like, that the system is using**).

Answer 7–9.

By said response, the Examiner has taken the position that **Or**'s disclosure of information pertaining to energy consumption (e.g., at page 2 ¶ 17 of **Or**) inherently describes data elements that "include various granularities of data types represented therein."

However, under principles of inherency, when a reference is silent about an asserted inherent characteristic, it must be clear that the missing

descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.

Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991). Said Or disclosures (reproduced below) relied upon by the Examiner are directed to managing energy usage.

[0017] For example, a business managing several apartment buildings (see FIG. 14) would use the system to monitor energy equipment in each building 10, such as the heating system and air conditioning system (HVAC) 12 (FIGS. 16-19). The computer software system identifies excessive energy usage 18 in a particular building and identifies the building floor 14 (FIG. 15) or machine, e.g., heating system, that is using excessive energy. The energy management software system 16 (FIG. 1) assists in diagnosing the reason for why excessive energy usage is occurring. In addition, the software system identifies voltage surge and current spike in the power line, identifies the source of problem, such as a potential equipment that is causing the problem, identifies equipment that may be effected by the problem, and then recommend immediate and long term solutions to the problem. See FIGS. 5 to 13.

[0026] The "Supply Side" of the system further recommends the potential benefit of fuel switching. Example, when gas price is high, the systems will recommend switches the gas usage to electricity usage, together with recommendation of certain equipment and operation changes. The systems consists of the database of energy generation activities and transportation capacities, combine these with real time energy pricing in the market, forecast customer energy pricing. The systems have interface to on-site generators with on/off control, including backup generators which are seldom used. An algorithm executed by the computer system determines whether it is more cost effective to buy power from the grid or to use on site generation, or use other fuel alternatives. The systems will also allow the selling of customer's excess energy from on site generation or its existing contract.

While these disclosures anticipate obtaining or generating information about energy usage, data elements that “include various granularities of data types represented therein” are not necessarily present. It is possible that information regarding energy usage may “include various granularities of data types represented therein” but “[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”

Hansgirk v. Kemmer, 102 F.2d 212, 214 (CCPA 1939), *quoted in Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991).

For the foregoing reasons, the rejection of independent claims 1 and 11 is not sustained. The rejection of the dependent claims is not sustained for the same reasons.

The rejection of claims 6, 8, 9, 16, 17, 19, 20, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Or and Amaratunga.

Independent claim 17 contains the same “granularity” limitation as independent claim 1 and 11 and the Examiner’s position with respect to it appears to be identical; that is, Or inherently describes it. *See* Final Act. 20–23. For similar reasons, we find that a preponderance of the evidence (i.e., the Or disclosures (reproduced above) relied upon by the Examiner) does not support a finding in fact that Or discloses data elements that “include various granularities of data types represented therein” as claimed. Accordingly, a prima facie case of obviousness over the cited prior art combination has not been made out in the first instance. Thus, the rejection of independent claim

17 is not sustained. The rejection of the dependent claims is not sustained for similar reasons.

CONCLUSIONS

The rejection of claims 1, 4, 5, 7, 10–12, 15, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by Or is not sustained.

The rejection of claims 6, 8, 9, 16, 17, 19, 20, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Or and Amaratunga is not sustained.

DECISION

The decision of the Examiner to reject claims 1, 4–12, 15–17, and 19–23 is reversed.

REVERSED