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EXAMINER
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GILKEY, CARRIE STRODER

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PAPER

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* NORBERT GRASS, THORSTEN RIEMER, THEODOR ROSCH,  
KLAUS RUINER, MATTHIAS SEIFERT, and GERHARD WELLER

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Appeal 2014-007387<sup>1</sup>  
Application 10/952,625<sup>2</sup>  
Technology Center 3600

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Before JOSEPH A. FISCHETTI, NINA L. MEDLOCK, and  
TARA L. HUTCHINGS, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> Our decision references Appellants' Appeal Brief ("App. Br.," filed February 4, 2014) and Reply Brief ("Reply Br.," filed June 23, 2014), and the Examiner's Answer ("Ans.," mailed April 22, 2014), and Final Office Action ("Final Act.," mailed October 16, 2013).

<sup>2</sup> Appellants identify Siemens Aktiengesellschaft of Munich, Germany as the real party in interest. App. Br. 3.

### STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 4, 5, 8, 9, 12, 13, and 16. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

### CLAIMED INVENTION

Appellants' claimed invention "relates to a method of operating a monitoring system of a facility" (Spec. 1, ll. 6-7).

Independent claims 1 and 9, reproduced below, are the independent claims at issue, and are representative of the subject matter on appeal:

1. A method of monitoring a facility including data having at least a first data set relevant to operational purposes of the facility and a second data set relevant to entertainment purposes of an individual within the facility, the method comprising:

providing a processing device in communication with an output device via a first transmission channel and a second transmission channel;

receiving as the first data set data relevant to operational purposes from one or more sensors and controllers to monitor operation of the facility;

receiving as the second data set data relevant to entertainment purposes from a data input device;

receiving a selection by the individual of either the first or the second data set, to allow viewing of either the first or the second data set by the individual;

assigning by a processor a respective identification parameter that differentiates between the first and second data sets;

processing by the processor the selected data set according to the respective identification parameter;

evaluating by a control device a current value of a status parameter related to an operational status of the facility, wherein the operational status comprises a current operational condition of the facility, wherein the operational status changes upon receiving a warning message, an alarm, or a report of critical status regarding the operational status of the facility, any of which require immediate attention of the individual, such that if the current value of the status parameter indicates that data relevant to operational purposes requires attention, output of the processed data set is suspended if the processed data set is related to entertainment purposes and replaced with data relevant to operational purposes;

after processing by the processor the selected data set according to the respective identification parameter, assigning the first data set to a first transmission channel in communication with an output device based on its respective identification parameter which predefines its respective transmission channel and assigning the second data set to a second transmission channel in communication with the output device based on its respective identification parameter which pre-defines its respective transmission channel, thereby separating data streams of the first and second data sets across two transmission channels, wherein the first transmission channel is enhanced with redundancy or encryption for security functionality and reliable transmission of data relevant to operational purposes; and

outputting the processed data set across the first or the second transmission channel to the output device based on both the current value of the status parameter and the respective identification parameter which pre-defines the respective transmission channel, wherein the processed data set is transmitted over the first transmission channel to the output device if the respective identification parameter of the processed data set is related to operational purposes of the facility and over the second transmission channel to the output device if the respective identification parameter of the processed data set is relevant to entertainment purposes, thereby avoiding interference between the first data set and the second data set.

9. A monitoring system for monitoring a facility comprising:

a processing device in communication with an output device via two transmission channels comprising a first transmission channel and a second transmission channel;

at least one data acquisition device capable of acquiring a first data set relevant to operational purposes of the facility from one or more sensors and controllers to monitor operation of the facility;

at least one data input device capable of receiving input of a second data set relevant to entertainment purposes of an individual within the facility;

at least one selecting device capable of receiving a selection by the individual of either the first or the second data set, to allow viewing of either the first or the second data set by the individual;

wherein the processing device is capable of assigning a respective identification parameter to differentiate between the first and second data sets and processing the selected data set according to the respective identification parameter, wherein the processing device is adapted to assign the first data set to the first transmission channel in communication with the output device based on its respective identification parameter which pre-defines its respective transmission channel and assign the second data set to the second transmission channel in communication with the output device based on its respective identification parameter which pre-defines its respective transmission channel, thereby capable of separating data streams of the first and second data sets across the two transmission channels, wherein the first transmission channel is enhanced with redundancy or encryption for security functionality and reliable transmission of data relevant to operational purposes;

a control device capable of evaluating a current value of a status parameter related to an operational status of the facility, wherein the operational status comprises a current operational condition of the facility, wherein the operational status changes upon receiving a warning message, an alarm, or a report of critical status regarding the operational status of the facility, any of which require immediate attention of the individual, the

control device capable of suspending output of the processed data set if the processed data set is related to entertainment purposes and replacing it with data relevant to operational purposes if the current value of the status parameter indicates that data relevant to operational purposes requires attention;

wherein the two transmission channels are capable of transmitting the processed data set over the first or the second of the transmission channels to the output device based on both the current value of the status parameter and the respective identification parameter which predefines the respective transmission channel, wherein the processed data set is adapted to be transmitted over the first transmission channel to the output device if the respective identification parameter of the processed data set is related to operational purposes of the facility and over the second transmission channel to the output device if the respective identification parameter of the processed data set is relevant to entertainment purposes, thereby avoiding interference between the first data set and the second data set.

#### REJECTIONS

Claims 1, 4, 5, 8, 9, 12, 13, and 16 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 4, 5, 8, 9, 12, 13, and 16 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter that Appellants regard as the invention.

Claims 1, 4, 8, 9, 12, and 16 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beckert (US 5,794,164, iss. Aug. 11, 1998), Gazit (US 2002/0070879 A1, pub. June 13, 2002), and Jones (US 5,991,271, iss. Nov. 23, 1999).

Claims 5 and 13 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beckert, Gazit, Jones, and Bossard (US 6,438,359 B1, iss. Aug. 20, 2002).

## ANALYSIS

### *Written Description*

We are not persuaded by Appellants' argument that the Examiner erred in rejecting claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement (App. Br. 8–11). Instead, we agree with, and adopt the Examiner's response to Appellants' argument as set forth at pages 2–4 of the Answer.

Independent claim 1 (and, therefore, dependent claims 4, 5, and 8) is directed to a computer-implemented method for monitoring a facility and recites that the method comprises, *inter alia*, “processing . . . the selected data set according to the respective identification parameter.” Independent claim 9 (including dependent claims 12, 13, and 16) is directed to a corresponding monitoring system for monitoring a facility and recites a processing device for performing various functions.

In rejecting claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, first paragraph, the Examiner finds that Appellants' Specification fails to describe the claimed invention in sufficient detail such that a person of ordinary skill in the art would reasonably conclude that Appellants had possession of the claimed subject matter at the time the application was filed (Final Act. 2–4). More particularly, the Examiner notes that although independent claim 1 (and, therefore, dependent claims 4, 5, and 8) refers to “processing . . . the selected data set, as well as other computer-performed

steps,” and claims 9, 12, 13, and 16 refer to “‘using a processing device’ for accomplishing particular functions,” the Specification does not describe how the processing step is accomplished or disclose the computer and algorithm that perform the claimed functions (*id.* at 3–4). Specifically referencing the wherein clause, i.e., “wherein the first transmission channel is enhanced with redundancy or encryption for security functionality and reliable transmission of data relevant to operational purposes,” as recited in independent claims 1 and 9, the Examiner further finds that although the Specification provides “redundancy concepts” and “encryption methods” as examples of ways to transmit data reliably and/or securely, the Specification fails to provide an adequate written description of how the enhanced redundancy or encryption is accomplished, e.g., what particular redundancy concepts/encryption methods are used, whether the processor performs these methods, or if additional hardware is involved (*id.* at 4).

Appellants acknowledge that for computer-implemented inventions, a determination of the sufficiency of disclosure requires an inquiry into both the sufficiency of the disclosed hardware as well as the disclosed software due to the interrelationship and interdependence of computer hardware and software (App. Br. 8). And Appellants argue that the written description requirement is satisfied because “one skilled in the art would know how to program the disclosed processor/processing device or computer system to process the selected data set according to a respective identification parameter[,] as claimed” (*id.* at 9), and also would know how to program the disclosed computer/processor to enhance a first transmission channel with redundancy or encryption (*id.* at 11).

Appellants' argument is not persuasive. As the Examiner observes, the issue is not whether a person of ordinary skill in the art would know how to program the processor to perform the recited steps (Ans. 2). Instead, the issue is whether the Specification describes the claimed invention in sufficient detail that a person skilled in the art could reasonably conclude that Appellants had possession of the claimed subject matter as of the filing date, *see Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562–63 (Fed. Cir. 1991), i.e., that Appellants possessed the invention, including how to program the disclosed computer to perform the claimed functions, at the time the present application was filed.

We agree with the Examiner that although the claims refer to using a computer to accomplish the claimed steps (claims 1, 4, 5, and 8) or as part of a system for performing certain functions (claims 9, 12, 13, and 16), the Specification discloses, at most, generic computers and processors (Final Act. 4). Thus, for example, although the claims recite “processing . . . the selected data set,” there is no explanation of exactly what the step of “processing . . . the selected data set” involves, e.g., the Specification does not describe “how the processor takes into account the input, including the selected data set, . . . what output the processing of the data would provide . . . [or] how the data is processed” (Ans. 5). The Specification also fails to describe how the first transmission channel is enhanced with redundancy or encryption such that it is unclear whether “the processor is programmed to provide redundancy and encryption, or if additional hardware is involved” (*id.* at 6).

The Federal Circuit has held that the written description requirement may be satisfied when the particular steps, i.e., an algorithm, necessary to

perform the claimed function, are “described in the specification.” *See, e.g., In re Hayes Microcomputer Prods., Inc. Patent Litigation*, 982 F.2d 1527, 1533–34 (Fed. Cir. 1992). The Federal Circuit also has acknowledged that the level of detail required for the written description requirement to be met is case-specific. *Id.*

Appellants’ Specification does not disclose an algorithm (whether in the form of a mathematical formula, in prose, as a flow chart,<sup>3</sup> or in any other manner) for performing the claimed functions, as called for in claims 1, 4, 5, 8, 9, 12, 13, and 16. Nor does the Specification otherwise describe the claimed invention in sufficient detail that a person skilled in the art could reasonably conclude that Appellants possessed the invention, including how to program the disclosed computer to perform the claimed functions, at the time the application was filed.

Therefore, we sustain the Examiner’s rejection of claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

#### *Indefiniteness*

The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether those skilled in the art would understand what is claimed when the claim is read in light of the specification. *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986). The primary purpose of 35 U.S.C. § 112, second paragraph, is to ensure that the claim language is

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<sup>3</sup> Figure 1 is a flowchart which, at best, shows a general, non-specific listing of broad steps without description of how “enhanced with redundancy or encryption for security functionality and reliable transmission of data relevant to operational purposes” is effected.

sufficiently clear such that the public has adequate notice of the metes and bounds of the claimed invention so that they can reasonably avoid infringement. *See In re Hammack*, 427 F.2d 1378, 1382 (CCPA 1970).

Here, we agree with the Examiner that, without any disclosure of the algorithm, or any other explanation in the Specification of how the disclosed processor performs the claimed functions, “potential infringers cannot be sure whether they are infringing the claims or not” (Ans. 6). Claims 1, 4, 5, and 8 recites a method for monitoring a facility comprises, *inter alia*, “processing . . . the selected data set”; and all of claims 1, 4, 5, 8, 9, 12, 13, and 16 recite that the first transmission channel is “enhanced with redundancy or encryption.” Yet without knowing how “processing . . . the selected data set” is accomplished, and how the first transmission channel is “enhanced with redundancy or encryption,” a potential infringer has no way of knowing the scope of the claims.

Appellants argue that a person skilled in the art would know whether a data set has been processed or not, and also would be able to recognize whether a transmission channel is enhanced with redundancy or encryption (App. Br. 11–13). Yet the phrases, “processing . . . the selected data set” and enhancing the “first transmission channel . . . with redundancy or encryption,” merely identify particular functions to be performed and end results to be obtained.

There is nothing in the Specification which gives assistance to help limit the scope of the claimed, “enhancing the transmission channel with redundancy or encryption.” Instead, the claim language leaves substantial room for ambiguity regarding the scope of the claims. And, as such, it renders the claims indefinite. *Cf. Ex parte Miyazaki*, 89 USPQ2d 1207,

1215 (BPAI 2008) (precedential) (if claim language is subject to multiple interpretations, the claim language is ambiguous and, thus, indefinite).

In view of the foregoing, we sustain the Examiner's rejection of claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, second paragraph, as indefinite.

*Obviousness*

*Independent claim 1 and dependent claims 4 and 8*

We are not persuaded by Appellants' argument that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 103(a) because Beckert, on which the Examiner relies, does not disclose or suggest that "if the current value of the status parameter indicates that data relevant to operational purposes requires attention, output of the processed data set is suspended if the processed data set is related to entertainment purposes and replaced with data relevant to operational purposes," as recited in claim 1 (App. Br. 13–14).

Beckert is directed to a vehicle computer system, and discloses at column 5, lines 26–40, that the system includes a monitor that is adjustable to different viewing positions so that the monitor can be viewed by the driver or other passengers in the vehicle. Beckert discloses that data displayed on the monitor may include information concerning the vehicle's performance, navigational directions, video movies for in-car entertainment, etc., and describes that the monitor is equipped with an automatic override switch that automatically disables the display of non-driving related data, e.g., video movies, games, when the monitor is positioned for driver viewing. Beckert discloses that in one implementation, the switch is an electrical cylindrical switch that closes when the display is capable of being

viewed by the driver; the software, thus, senses the monitor display position and only allows permitted information to be displayed.

The Examiner equates the “value of the status parameter,” as called for in claim 1, to whether the Beckert switch is open or closed (Final Act. 9). And the Examiner reasons that Beckert, thus, discloses that the entertainment information is suspended based on the value of the status parameter switch, i.e., when the switch is closed (*id.*).

Appellants argue rather than suspending the output of data related to entertainment purposes based on an indication that data relevant to operational purposes require attention, as called for in claim 1, Beckert switches to driving-related data based on the viewing position of the system monitor. That argument is not persuasive at least because it is not commensurate with the language of claim 1.

Claim 1 recites that output of data related to entertainment purposes is suspended “if the current value of the status parameter indicates that data relevant to operational purposes requires attention.” We agree with the Examiner that when the “value” of the Beckert switch is “closed,” i.e., when the driver has positioned the monitor for driver viewer, this indicates that “data relevant to operational purposes requires attention,” and in that situation, output of data related to entertainment purposes, e.g., video movies, games, is suspended. Beckert, thus, discloses “if the current value of the status parameter indicates that data relevant to operational purposes requires attention, output of the processed data set is suspended if the processed data set is related to entertainment purposes and replaced with

data relevant to operational purposes,” as recited in claim 1, under a broadest, reasonable interpretation.<sup>4</sup>

In rejecting claim 1 under § 103(a), the Examiner acknowledges that Beckert does not explicitly disclose “wherein the operational status changes upon receiving a warning message, an alarm, or a report of critical status regarding the operational status of the facility, any of which require immediate attention of the individual,” as recited in claim 1 (Final Act. 10). The Examiner cites Gazit to cure the deficiency of Beckert, and the Examiner concludes that it would have been obvious to a person of ordinary skill at the time of Appellants’ invention to use the “report-based override concept of Gazit in combination with the in-vehicle system of Beckert, such that the override switch can be based upon either a particular orientation of the display or upon receipt of a critical report, because it would promote better vehicle safety habits” (*id.* at 11).

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<sup>4</sup> Appellants argue, for the first time, in their Reply Brief that Beckert does not disclose or suggest the argued limitation because claim 1 “requires that the status parameter is related to an operational status of the facility and that the operational status comprises a current operational condition of a facility” and the Beckert monitor/switch position does not comprise a current operational condition of a facility (Reply Br. 7). That argument is untimely, and is considered waived in the absence of any showing of good cause why the argument could not have been timely presented in Appellants’ Appeal Brief. *See In re Hyatt*, 211 F.3d 1367, 1373 (Fed. Cir. 2000) (noting that an argument not first raised in the brief to the Board is waived on appeal); *Ex parte Nakashima*, 93 USPQ2d 1834, 1837 (BPAI 2010) (informative) (explaining that arguments and evidence not timely presented in the Principal Brief, will not be considered when filed in a Reply Brief, absent a showing of good cause explaining why the argument could not have been presented in the Principal Brief).

We are not persuaded of Examiner error by Appellants' arguments that no rational reasoning exists to combine the teachings of Beckert with those of Gazit and that modifying Beckert in light of Gazit, as the Examiner proposes, would change the principle of operation of Beckert (App. Br. 14–17). Instead, we agree with, and adopt the Examiner's response to Appellants' arguments as set forth at pages 8–9 of the Answer.

In view of the foregoing, we sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 103(a). For the same reasons, we also sustain the rejection of dependent claims 4 and 8, which are not argued separately except based on their dependence from claim 1 (App. Br. 17).

*Independent claim 9 and dependent claims 12 and 16*

Appellants argue that claim 9 is allowable with reference to Appellants' arguments with respect to claim 1. We found those arguments unpersuasive with respect to claim 1, and we find them equally unpersuasive with respect to claim 9. Therefore, we sustain the Examiner's rejection of claim 9 under 35 U.S.C. § 103(a). For the same reasons, we also sustain the rejection of dependent claims 12 and 16, which are not argued separately except based on their dependence from claim 9 (App. Br. 18).

*Dependent claims 5 and 13*

Claims 5 and 13 depend from independent claims 1 and 9, respectively. Appellants do not present any arguments in support of the patentability of claims 5 and 13 except to assert that the claims are allowable based on their dependence on claims 1 and 9. We are not persuaded for the reasons set forth above that the Examiner erred in rejecting claims 1 and 9 under 35 U.S.C. § 103(a). Therefore, we sustain the Examiner's rejection of claims 5 and 13 under 35 U.S.C. § 103(a).

DECISION

The Examiner's rejection of claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, first paragraph, is affirmed.

The Examiner's rejection of claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 112, second paragraph, is affirmed.

The Examiner's rejections of claims 1, 4, 5, 8, 9, 12, 13, and 16 under 35 U.S.C. § 103(a) are 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