



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.
12/708,232 02/18/2010 Sven Powilleit H0022280 4042

108134 7590 07/17/2017
HONEYWELL/ADDITON
115 Tabor Road
P.O. Box 377
MORRIS PLAINS, NJ 07950

EXAMINER

CORRIELUS, JEAN M

ART UNIT PAPER NUMBER

2162

NOTIFICATION DATE DELIVERY MODE

07/17/2017

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):

patentservices-us@honeywell.com
docket@ahpapatent.com
Katharine.Lawther@Honeywell.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SVEN POWILLEIT, ALDO M. CABALLERO,
CHRISTOPHER W. PORTER, GREGORY PAYNE, and
JOHN PETTINELLI

Appeal 2017-004638
Application 12/708,232¹
Technology Center 2100

Before DEBRA K. STEPHENS, DANIEL J. GALLIGAN, and
JESSICA C. KAISER, *Administrative Patent Judges*.

GALLIGAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's Final Rejection of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.²

¹ According to Appellants, the real party in interest is Honeywell International, Inc. App. Br. 3.

² Our Decision refers to Appellants' Appeal Brief filed April 25, 2016 ("App. Br."); Appellants' Reply Brief filed January 25, 2017 ("Reply Br."); Examiner's Answer mailed November 25, 2016 ("Ans."); Advisory Action

STATEMENT OF THE CASE

Claims 1, 13, and 17 are independent claims. Claim 1 is reproduced below:

1. A remote device monitoring system, comprising:

a host server including at least a processor, system bus, user input interface configured to communicate with a user input device, display interface configured to communicate with a display, network interface configured to communicate with at least one remote device and at least one data storage means including a database, a performance look-up table and at least one analyzer module including program instructions that, when implemented by the processor, receive at least one performance parameter value from at least one remote device and query the performance look-up table;

wherein the performance look-up table is configured to store a non-zero failure value;

wherein the failure value is initially set to (i) a predetermined failure value or (ii) a calculated failure value associated with at least one performance parameter value received by the host server from at least one remote device;

wherein, when the system detects a failure of a remote device in communication with the host system, the failure value is automatically updated based upon a mathematical calculation that includes (i) the performance parameter value received contemporaneously with the detection of the remote device failure and (ii) the most recent failure value stored in the performance lookup table.

References

Stratton	US 4,318,176	Mar. 2, 1982
Fandel	US 7,232,063 B2	June 19, 2007
Lane	US 2010/0027582 A1	Feb. 4, 2010

mailed March 8, 2016 (“Adv. Act.”); and Final Office Action mailed December 18, 2015 (“Final Act.”).

Zhao	US 2011/0149725 A1	June 23, 2011
Johnson	US 2011/0246515 A1	Oct. 6, 2011

Examiner's Rejections

Claims 1, 2, 10–13, 16–18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson, Zhao, and Stratton. Final Act. 3–10.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson, Zhao, Stratton, and Fandel. *Id.* at 10–11.

Claims 5–9, 14, 15, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson, Zhao, Stratton, and Lane. *Id.* at 11–15.

ANALYSIS

We disagree with Appellants' contentions and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken; (2) the reasons set forth by the Examiner in the Advisory Action; and (3) the reasons set forth by the Examiner in the Answer in response to the Appeal Brief. With respect to the claims argued by Appellants, we highlight and address specific findings and arguments for emphasis as follows.

Obviousness: Claims 1–20

“performance look-up table . . . performance parameter value”

Appellants contend the Examiner erred in finding Johnson teaches “a performance look-up table” and “at least one performance parameter value” for a “system [that] detects a failure of a remote device,” as recited in claim 1, and similarly recited in claims 13 and 17. App. Br. 12–14; Reply Br. 4–7.

Specifically, Appellants argue the “performance look-up table” found by the Examiner in Johnson is “a record of whether the remote information handling system performed a task *ordered* by the management station.”

App. Br. 13. According to Appellants, “Johnson’s management system . . . tasks a remote information handling system with a task to execute, and then queries the information handling system to determine if the task was executed,” but, they argue, the claimed “performance look-up tables and performance parameter values are described in relationship with a system that monitors *component* failure, and serves to predictively determine when those *components* will fail in similar devices” (App. Br. 14; Reply Br. 5–6).

We are not persuaded. The Examiner finds, and we agree, Johnson teaches an information handling system, i.e., a remote device, which executes a task. Final Act. 3 (citing Johnson ¶¶ 12–14, Fig. 4); *see* Johnson ¶ 28. The Examiner further finds (Final Act. 4; Ans. 20), and we agree, Johnson teaches a “performance look-up table” defining “a range of desirable execution times for the task by setting a ‘Low Run Time[,]’ . . . a ‘High Run Time[,]’” and “an ‘Expected Run Time’” (Johnson ¶ 68). Moreover, we agree with the Examiner’s finding (Final Act. 3–4; Ans. 22) that Johnson’s system receives the execution time for each task, i.e., “a performance parameter value,” which is “compared against the ‘Low Run Time,’ ‘High Run Time,’ and ‘Expected Run Time’ parameters . . . to determine whether an error has occurred” (Johnson ¶ 68). That is, when “the execution time for the particular task is not within the predetermined range of execution times,” Johnson “indicat[es] an error condition or failure of the task” executed by the information handling system. Johnson ¶ 91.

Appellants' argument that Johnson's performance parameter and performance look-up table are not "in relationship with a system that monitors *component* failure, and serves to predictively determine when those *components* will fail in similar devices" (App. Br. 14) is not commensurate with the scope of the claims. The claims do not recite that the performance parameter and performance look-up table predictively determine failure in similar devices. At best, the claims recite the performance look-up table's "failure value is automatically updated" based on the performance parameter, but the claims do not recite the performance parameter or the performance look-up table are then used to predict failure in similar devices.

Furthermore, the failure of Johnson's information handling system due to untimely task execution is not precluded from the recited "failure of a remote device." Specifically, the claims do not recite language excluding device failure by untimely task execution. Further, the Specification does not provide any definition of "failure" much less define "failure" to exclude failure due to untimely execution. Appellants highlight examples in the Specification describing types of failures (App. Br. 13; Reply Br. 4–5), but those examples are not limiting definitions (Spec ¶¶ 18 ("[e]xemplary performance parameter values"), 22 ("[i]n one exemplary embodiment") (emphases added)). Indeed, the Specification states "performance parameters used herein are exemplary and not intended to limit the invention." Spec. ¶ 38. Moreover, the Specification teaches "performance parameter values include accumulated processor run time," at least suggesting untimely task execution can be a device failure. Spec. ¶ 18. The Specification additionally does not define explicitly the term "performance look-up table." Because neither the Specification nor the claims preclude

device failure due to untimely task execution, Johnson’s execution time and range of desirable execution times used to determine failure because of untimely task execution by a device (Johnson ¶¶ 68, 91), respectively, teach a performance parameter and a performance look-up table.

Accordingly, we are not persuaded the Examiner erred in finding Johnson teaches “a performance look-up table” and “at least one performance parameter value” for a “system [that] detects a failure of a remote device,” within the meaning of claims 1, 13, and 17.

“a predetermined failure value”

Appellants contend Zhao does not teach “(i) a predetermined failure value or (ii) a calculated failure value,” as recited in claims 1, 13, and 17. App. Br. 14–16. Specifically, Appellants argue “the ‘predetermined failure value’ is described in Appellants’ specification as predicting when a system component is likely to fail,” but, they argue, Zhao teaches a “failure threshold [that] simply has nothing to do with the components of the device, predicting those components’ failures, etc.” *Id.* at 15 (citing Zhao ¶ 68).

We are not persuaded. As discussed *supra*, we agree with the Examiner’s finding that Johnson teaches device failure. Furthermore, the Examiner finds, and we agree, Zhao teaches “a failure threshold,” i.e., a “predetermined failure value” (Final Act. 4 (citing Zhao ¶ 68)). Indeed, Zhao teaches a “failure counter 334 may include a current failure threshold 338 that indicates the number of failure attempts,” causing Zhao to switch systems when the failure threshold is reached (Zhao ¶ 68), i.e., Zhao’s failure threshold indicates the failure of a system when the amount of attempts to use that system reaches a limit.

Appellants' argument that Zhao's failure threshold does not "predict[] when a system component is likely to fail" (App. Br. 15) is not persuasive because it is not commensurate with the scope of the claims, which do not recite language requiring the predetermined failure value to predict when a component will fail. Furthermore, Appellants' Specification does not define expressly a "predetermined failure value" as predictive of failure. Rather, paragraph 24 of the Specification, cited by Appellants, provides, in part: "Preferably, the performance look-up table 248 is initially populated with predetermined values for each performance parameter, the predetermined values being generally known to the remote device 200 original equipment manufacturer (OEM) as representing known failure values." Thus, this portion of the Specification provides, as an example, populating a table with values "generally known . . . as representing known failure values." To the extent such values are predictive of failure, Zhao similarly describes a failure threshold, which predicts that a system fails when the system has been unsuccessfully used the threshold number of times (Zhao ¶ 68).

Additionally, because we agree with the Examiner that the combination teaches "at least one of" the alternatively recited options, i.e., "(i) a predetermined failure value," we need not address Appellants' arguments directed to the other alternatively recited limitation, i.e., "(ii) a calculated failure value." App. Br. 15. Accordingly, we are not persuaded the Examiner erred in finding Zhao teaches "(i) a predetermined failure value or (ii) a calculated failure value," within the meaning of claims 1, 13, and 17.

“system detects a failure of a remote device”

Appellants contend the Examiner erred in finding Stratton teaches its “system detects a failure of a remote device,” as recited in claims 1, 13, and 17. App. Br. 16–17. Specifically, Appellants argue Stratton does not detect device failure because “[t]he motors of Stratton have not failed, they are still working.” *Id.* at 17.

We are not persuaded. The Examiner finds, and we agree, Stratton calculates an error value for a remote printer “based on the recent error value and the stored average error value” for the printer. Final Act. 4 (citing Stratton 29:29–54).

Initially, as discussed *supra*, Johnson teaches a “system detect[ing] a failure of a remote device,” and Appellants’ arguments directed to Stratton (App. Br. 16–17) are not persuasive for at least that reason.

Furthermore, Appellants’ argument that Stratton’s errors are not device failures because Stratton’s printer motors “are still working” (*id.* at 17), is not commensurate with the scope of the claims. Neither the claims nor the Specification define device failure and do not limit device failure to any particular type of failure. In particular, neither the claims nor the Specification preclude operating errors, i.e., Stratton’s printing process error, from the meaning of failure. As such, we are not persuaded the Examiner erred in finding Stratton teaches “the system detects a failure of a remote device,” within the meaning of claims 1, 13, and 17.

Accordingly, we are not persuaded the Examiner erred in finding the references teach or suggest the limitations of claims 1, 13, and 17.

Non-Analogous Art

Appellants argue the Examiner improperly combined Johnson, Zhao, and Stratton because the references are non-analogous art. App. Br. 17–19. Specifically, Appellants argue none of the prior art references is directed to “the problems addressed in the Appellants’ [S]pecification,” which Appellants contend involve addressing remote device failure using “a predictive remote device management system configured to monitor networked devices and more effectively manage remote device/and or system component failure and performance.” *Id.* at 18–19 (citing Spec. ¶ 7) (emphasis omitted).

We are not persuaded. We agree with the Examiner that the claimed invention is directed to the “problem of identifying failures and performance issues” (Final Act. 3) and “managing failure and performance” (Ans. 23–24). *See also* Adv. Act. 2 (“[T]he applicant’s claimed invention monitors failure and/or performance and all three references address the particular problem with which the applicant is concerned.”). Indeed, the claims recite a system which identifies a failure, i.e., “the system detects a failure of a remote device,” and manages that failure, i.e., “the failure value is automatically updated.” Claim 1; *see* claims 13, 17. We further agree with the Examiner that “[e]ach [of] Johnson, Zhao, and Stratton” teaches systems for “managing . . . system failure and . . . detecting . . . system failure.” Ans. 23; Adv. Act. 2. More specifically, Johnson detects a system failure “in response to determining that the execution time for the particular task is not within the predetermined range of execution times” and responds to the detected failure. Johnson ¶¶ 91–92; *see* Johnson ¶¶ 68–69. Zhao detects a system failure by using a “current failure threshold 338 that indicates the

number of failure attempts” and manages that failure “[i]f the current failure count 336 reaches the current failure threshold 338.” Zhao ¶ 68. Stratton detects system errors, i.e., failures, and manages those errors by “provid[ing] an average base error . . . which will enable the control system to” minimize future system errors. Stratton 29:39–59. We find a skilled artisan would have understood the applicability of the prior art to the problems faced by the inventor because Johnson, Zhao, and Stratton all are pertinent to the particular problem with which the inventor was involved — detecting and managing system failures.

Accordingly, we are not persuaded the Examiner erred in combining the asserted references. Therefore, we sustain the rejection of claims 1, 13, and 17 under 35 U.S.C. § 103(a). We likewise sustain the rejections under 35 U.S.C. § 103(a) of claims 2–12, 14–16, and 18–20, for which Appellants offer no additional persuasive arguments for patentability. *See* App. Br. 17, 19.

DECISION

We affirm the Examiner’s decision to reject claims 1–20 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED