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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHEL AUTHIER

Appeal 2014-008659
Application 12/570,407
Technology Center 3700

Before JOSEPH A. FISCHETTI, CYNTHIA L. MURPHY, and
BRUCE T. WIEDER, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellant¹ appeals under 35 U.S.C. § 134 from the Examiner's rejections of claims 42–46 and 51–60. We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

We AFFIRM.

¹ The Appellant identifies the real party in interest as “GECKO ALLIANCE GROUP INC.” (Appeal Br. 3.)

STATEMENT OF THE CASE

The Appellant’s invention “relates to bathing unit systems that are operative to heat the water used therewith via power generated from solar energy.” (Spec. 1, lines 13–15.)

*Illustrative Claim*²

42. A control system for a bathing unit system, the bathing unit system having a water receptacle holding water and a set of bathing unit components, the set of bathing unit components including a heating module, said control system comprising:
- a) a first input for receiving electrical power from a first power source;
 - b) a second input for receiving electrical power from a second power source, wherein the second power source is distinct from the first power source;
 - c) a controller in communication with said heating module, said first input and said second input, said controller being programmed for:
 - i) monitoring parameters of operation of the bathing unit system;
 - ii) determining if the bathing unit system is being used by one or more bathers at least in part by processing the monitored parameters;
 - iii) selecting at least one of the first power source and the second power source to supply electrical power to the heating module of the bathing unit system, the selecting being made at least in part based on results of the determining; and
 - iv) operating the heating module by using electrical power supplied by the selected at least one of the first power source and the second power source.

² This illustrative claim is quoted from the Claims Appendix (“Claims App.”) set forth on pages 21–24 of the Appeal Brief.

References

Bajka	US 4,322,297	Mar. 30, 1982
Ishikawa	US 4,697,136	Sept. 29, 1987
Cline	US 6,407,549 B1	June 18, 2001
Authier	US 6,476,363 B1	Nov. 5, 2002

Rejections

The Examiner rejects claims 42, 43, 45, and 51–60 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, and Ishikawa. (Final Action 2.)

The Examiner rejects claims 44 and 46 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, Ishikawa, and Cline. (*Id.* at 5.)

ANALYSIS

Claims 42, 51, and 56 are the independent claims on appeal, with the rest of the claims on appeal (claims 43–46, 52–55, and 57–60) depending therefrom. (Claims App.) Independent claims 42, 51, and 56 are each directed to a “control system for a bathing unit system.” (*Id.*) The Examiner finds that Authier discloses such a control system. (*See* Final Action 2.) Authier shows, in Figure 1, a “hot tub spa system.” (Authier, col. 1, lines 17–18.)

Independent claims 42, 51, and 56 each recites a “heating module,” a “first power source,” and a “controller in communication with said heating module.” (Claims App.) The Examiner finds that Authier discloses such components. (*See* Final Action 2.) In Authier’s hot tub spa system, water is pumped “through heater 3 where it is heated by heating element 5” which is connected “to a suitable power source, such as a standard household electric

circuit.” (Authier, col. 1, lines 17–24, 45–46.) Authier also discloses a spa controller 7 that “is programmed to remove the voltage to regulation relay 111” whereby “power to the heating element 5 will be interrupted.” (*Id.* at col. 2, lines 50–51, 53–56; *see also id.* Fig. 1.)

Independent claims 42, 51, and 56 also recite a “second power source” and require the controller to be programmed for “selecting at least one of the first power source and the second power source to supply electrical power to the heating module.” (Claims App.) The Examiner finds that it would have been obvious, in view of the teachings of Bajka of Ishikawa, to “adapt Authier with a power source that is powered by an electrical source and a solar source” and “to modify and program” Authier’s spa controller 7 to selectively select the first non-solar power source and/or the second solar power source. (Final Action 4–5.)³

Independent claims 42, 51, and 56 further recite limitations relating to the criteria used by the controller to select the first and/or second power sources. As these limitations differ among the independent claims, we address them separately below.

Independent Claim 42

Independent claim 42 recites that the controller is programmed for “determining if the bathing unit system is being used by one or more bathers at least in part by processing the monitored parameters” and that the selection of the power source is “made at least in part based on results of the

³ Insofar as the Appellant argues that any of the Examiner’s above-discussed findings are incorrect, incomplete, or otherwise erroneous with respect to independent claims 42, 51, and 56, we are not persuaded by these arguments.

determining.” (Claims App.) The Examiner finds that Authier discloses such a determination and explains that, in Authier, “maintaining the temperature level” in the water receptacle “is based on and controlled by the user that sets or uses the bathing unit system to function.” (Final Action 3.) Authier discloses that “[a] user of the spa can set the desired temperature of the water inside tub 2 to a predetermined level from a keypad 200” and “[w]hen the temperature of the water inside the tub reaches the predetermined level,” spa controller is programmed to [interrupt] power to heating element 5.” (Authier, col. 2, lines 51–56.)

The Appellant argues the feature of “determining if the bathing unit system is being used by one or more bathers at least in part by processing the monitored parameters” is absent in Authier. (*See* Appeal Br. 9.) The Appellant emphasizes the term “bathers” in this limitation and contends that this limitation requires “determining if one or more people may be using the water receptacle of the bathing unit system to bathe.” (*Id.* at 9.) The Appellant acknowledges that Authier teaches a “user” of the spa providing an input on a control panel (i.e., keypad 200), but argues that “[n]o mention is made of such user using the receptacle to bathe” and so “nothing in Authier provides an indication as to whether the system ‘is being used by one or more bathers.’” (*Id.* at 10, 12.)

We are not persuaded by this argument because claims “are to be given their broadest reasonable interpretation consistent with the [S]pecification.” *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Here, the Specification conveys that “there are many ways that the control unit can detect that the bathing unit system is in use.” (Spec. 17, lines 3–4, reference numeral(s) omitted.) For example, “the

control unit 54 can detect[] that the cover is off” or “the control unit 54 can detect that the system is in use when a user activates a ‘start’ button on the control panel 32.” (*Id.* at lines 4–8.) In other words, the Specification conveys that a controller’s detection of a user input can indeed provide an indication as to whether the system is being used by one or more bathers. The Appellant does not adequately address why a user’s input on Authier’s keypad 440 would not likewise provide such an indication.

The Appellant additionally argues that it is incorrect to conclude that “knowledge that Authier’s bathing unit system is functioning serves, in and of itself, as a determination that the bathing unit system ‘is being used by one or more bathers.’” (Appeal Br. 11.) We are not persuaded by this argument because our decision relies upon the Examiner’s findings regarding Authier’s disclosure that its spa controller 7 detects user input on a keyboard 400. (*See* Final Action 3.)

Thus, we are unpersuaded by the Appellant’s position that the Examiner errs in finding that Authier teaches the determination required by independent claim 42. We are likewise unpersuaded, therefore, by the Appellant’s argument that “without carrying out the claimed determining step” it is impossible for the prior art “to teach a feature that is dependent upon such determining.” (Appeal Br. 11.)

Thus, we sustain the Examiner’s rejection of independent claim 42 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, and Ishikawa.

Independent Claim 51

Independent claim 51 requires the selection of the power source be “made, at least in part, on [a] stored alternating usage pattern.” (Claims App.) The Examiner finds that it would have been obvious, in view of the

teachings of Bajka and Ishikawa, to modify and program Authier’s spa controller to select the power source based on an alternating usage pattern. (*See* Final Action 4–5.) The Examiner explains that such modification is “a matter of routine experimentations” to conserve the use of the non-solar power source “to save energy and cost.” (*Id.* at 5.)

The Appellant argues that Bajka “does not actually disclose a time-based selection *of the source* of the heating.” (Appeal Br. 15.) According to the Appellant, in Bajka, “the actual source to be used (gas or solar or both) is decided by the circuit, based on external factors (e.g., temperature and available heat) and *not* based on a programming choice (or stored alternating usage pattern). (*Id.*)

We are not persuaded by this argument because the Examiner “need not seek out precise teachings directed to the specific subject matter of the challenged claim” as “the inferences and creative steps that a person of ordinary skill in the art would employ” can be taken into account. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Here, Bajka discloses “preferential solar heating,” “time-switched operation,” and “a combination thereof.” (Bajka, Abstract.) Bajka also teaches that “[s]olar panels can be set to operate during the time of day when solar energy is most likely to be available.” (*Id.* at col. 2, lines 5–7.) One of ordinary skill in the art would infer from these teachings that the selection of a solar versus non-solar power source for heating a spa tub could be based on a stored alternating usage pattern. (*See* Final Action 4–5.) Insofar, as Bajka teaches that time-switched operation should be used only in tandem with external factors, we note that independent claim 52 recites that the selection is made “**at least in**

part based on [the] stored alternating usage pattern.” (Claims App., emphasis added.)

Thus, we sustain the Examiner’s rejection of independent claim 51 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, and Ishikawa.

Independent Claim 56

Independent claim 56 recites that the controller is programmed for “deriving energy consumption information associated with the bathing unit system at least in part by processing information conveying an amount of usage of at least one [sic] the first power source and the second power source over a time period” and that the selection of the power source is “made at least in part based on the derived energy consumption information.” (Claims App.) The Examiner finds that it would have been obvious, in view of the teachings of Bajka and Ishikawa, to modify and program Authier’s spa controller to select the power source based on “an amount of usage of either the power sources.” (*See* Final Action 4–5.) The Examiner explains that such modification is “a matter of routine experimentations” to conserve the use of the non-solar power source “to save energy and cost.” (*Id.* at 5.)

The Appellant argues that Bajka does not consider “‘deriving energy consumption information’ by processing usage of the power sources ‘over a time period’ and then selecting the power source to be used to supply electrical power ‘at least in part based on the derived energy consumption information.’” (Appeal Br. 19.)

We are not persuaded by this argument because the Specification conveys that “[t]he energy consumption information derived by the control unit can include the [] amount of time the second power source is in use.”

(Spec. 24, lines 21–27, reference numeral(s) omitted.) As discussed above, claims are to be given their broadest reasonable interpretation consistent with the Specification. Bajka discloses that its controller possesses “programmable input means” for the “receipt and storage of time sequence input and temperature input.” (Bajka, col. 3, lines 43–45.) Bajka also teaches that “solar heating, when possible, will be preferred to non-solar.” (*Id.* at col. 6, lines 22–23.) The Appellant does not adequately address why one of ordinary skill in the art would not infer that Bajka’s controller could derive (i.e., recall) stored/programmed time information and corresponding usage of its solar power source during these stored time periods.⁴ And Bajka discloses that its controller produces time-based signals based, at least in part, on such stored time information. (*See id.* at col. 3, lines 45–46.)

Thus, we sustain the Examiner’s rejection of independent claim 56 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, and Ishikawa.

Dependent Claims 43–46, 52–55, and 57–60

The Appellant does not argue dependent claims 43 and 45 separately from independent claim 42; does not argue dependent claims 52–55 separately from independent claim 51; and does not argue dependent claims 57–60 separately from independent claim 56 (*see* Appeal Br. 8, 14, 17); and so these dependent claims fall with their base independent claims. The Appellant’s arguments with respect to dependent claims 44 and 46 are premised only upon the additional prior art reference (Cline) not remedying

⁴ As also discussed above, the Examiner “need not seek out precise teachings directed to the specific subject matter of the challenged claim” as “the inferences and creative steps that a person of ordinary skill in the art would employ” can be taken into account. *KSR* 550 U.S. at 419.

the above-discussed alleged deficiencies in the Examiner's rejection of independent claim 42 (*see id.* at 20) and so these dependent claims also fall with independent claim 42.

Thus, we sustain the Examiner's rejection of dependent claims 43, 56, 52–55, and 57–60 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, and Ishikawa; and we sustain the Examiner's rejection of dependent claims 43 and 45 under 35 U.S.C. § 103(a) as unpatentable over Authier, Bajka, Ishikawa, and Cline.

DECISION

We AFFIRM the Examiner's rejections of claims 42–46 and 51–60.

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