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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KOLJA EGER, ROLAND GERSCH, JOERG HEUER, and
MARTIN WINTER

Appeal 2019-001002
Application 14/427,764
Technology Center 2100

Before JEREMY J. CURCURI, JON M. JURGOVAN, and
AMBER L. HAGY, *Administrative Patent Judges*.

HAGY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–15, which are all of the pending claims. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. In the Appeal Brief, Appellant identifies the real party in interest as the original applicant, Caterva GmbH. Appeal Br. 3. On July 17, 2019, documents were filed stating that the application has been re-assigned to Alelion Energy Systems AB and requesting that the applicant's name be changed accordingly.

CLAIMED SUBJECT MATTER

According to Appellant, “[t]he invention relates to a method and apparatus for performing a local control of an energy resource by an energy resource controller connected to a control unit of an energy management system of a power supply grid.” Spec. 1:8–12. By way of background, Appellant’s Specification describes systems within electrical power supply grids, in which “distributed energy resources comprising power sources, power consumers and energy storage devices can be controlled by energy resource controllers of an energy management system.” *Id.* at 2:20–25. Appellant’s Specification describes that “[i]n a conventional energy management system[,] the energy resource controllers of the distributed energy resources connected to the power supply grid can be connected via a communication link to a control unit[,] which can be located in a central control operation center.” *Id.* at 2:26–30. Appellant’s Specification further notes that “[t]his communication link is usually unreliable and there are times where no communication via the communication link to control the energy resource controllers by the remote control unit is possible. The communication link can be lost entirely or the bandwidth of the communication link can be reduced significantly.” *Id.* at 3:5–10. Accordingly, according to Appellant’s Specification, “there is a need for an apparatus and a method which allows a contribution of a distributed energy resource even when the communication link between a control unit and the energy resource controller of said energy resource is lost or limited.” *Id.* at 4:5–9.

Claims 1 and 14 are independent. Claim 1, reproduced below, illustrates the claimed subject matter:

1. An energy resource controller of an energy resource within an energy management system of a power supply grid, wherein said energy resource controller is adapted to monitor a communication link to a remote controller of said energy management system, and to emulate after a loss of communication via said communication link has been detected, and after a limitation of communication via said communication link has been detected, a continued reception of control parameters and/or control limits from said remote controller to perform a local control of the associated energy resource on the basis of the emulated control parameters and/or control limits according to an applied energy management policy.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Johnson	US 2012/0326511 A1	Dec. 27, 2012
Forbes, Jr. (“Forbes”)	US 2014/0018969 A1	Jan. 16, 2014

TCP Keepalive HOWTO, TLDP.org (June 7, 2017), <https://web.archive.org/web/20070607151628/http://tldp.org/HOWTO/TC-P-Keepalive-HOWTO/overview.html> (“TLDP”).

REJECTIONS²

Claims 1–5, 10–12, and 14 stand rejected under 35 U.S.C. § 102(a)(2) as being anticipated by Forbes. Final Act. 3–9.

² All rejections are under the provisions of Title 35 of the United States Code in effect after the effective date of the Leahy-Smith America Invents Act of 2011.

Claims 6–9 and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Forbes and Johnson. Final Act. 10–16.

Claim 13 stands rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Forbes and TLDP. Final Act. 16–17.

OPINION

We have considered Appellant’s arguments and contentions (Appeal Br. 10–24; Reply Br. 2–11) in light of the Examiner’s findings and explanations (Final Act. 2–17; Ans. 3–5). For the reasons set forth below, we are not persuaded of Examiner error in the rejections of the pending claims, and we, therefore, sustain the Examiner’s rejections.

A. § 102(a)(2) Rejection over Forbes (Claims 1–5, 10–12, and 14)

Claims 1–5, 10–12, and 14 are all rejected as anticipated by Forbes. Final Act. 3–9. Appellant argues the patentability of dependent claims 2–5 and 10–12 together with independent claims 1 and 14, which Appellant argues collectively. *See* Appeal Brief 18. We select claim 1 as the representative claim, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(iv). Claims 2–5, 10–12, and 14 stand or fall with claim 1.

The Examiner finds Forbes discloses all limitations of claim 1. Final Act. 3–4 (citing Forbes ¶¶ 90, 125, Fig. 2). Appellant presents arguments that the Examiner’s findings are in error for several reasons, none of which are persuasive of Examiner error. *See* Appeal Br. 10–19.

Appellant first argues the Examiner’s finding of anticipation is in error because it fails to acknowledge that claim 1 recites two separate emulation conditions, one in which there is a “loss of communication” and a second in which there is a “limitation of communication.” *See id.* at 12–13.

Appellant then argues Forbes fails to disclose the second emulation condition, in which emulation is initiated “after a limitation of communication via said communication link has been detected.” *Id.* at 13 (emphasis omitted).

The Examiner responds that Forbes “describes responding to a loss of communication, which is understood as any loss of communication whether a full loss of communication, relating to the instant application’s ‘loss of communication’, or a partial loss of communication such as packet loss or restricted bandwidth, which relates to the instant application’s ‘limitation of communication’.” Ans. 3 (citing Forbes ¶ 125). The Examiner further finds “Forbes teaches autonomously controlling a unit when the remote controller is no longer capable of doing so, which would occur *in either a loss or limited communication scenario*. Therefore the loss of communication of Forbes can relate to communication loss or limitation as described in the instant application.” *Id.* (emphasis added). The Examiner also notes that, although the Specification mentions both “loss” and “limitation” of communication, the Specification does not define either term. *Id.*

Appellant responds that the Specification makes a “clear distinction between a loss of communication, wherein communication is lost entirely, and a limitation of communication, wherein communication is operational, but limited” by repeatedly referring to communication being “lost *or* limited.” Reply Br. 5–6 (emphasis added).

Appellant’s argument is not persuasive of Examiner error because it does not address the substance of the Examiner’s findings. The Examiner finds Forbes discloses local emulation in the event the remote controller is no longer capable of controlling the energy resource controller, which the

Examiner finds may be due to communication loss *or* limitation. *See* Ans. 3 (citing Forbes ¶ 125). As the Examiner explains, “[f]rom the perspective of the receiver of the communication, a limitation of communication, such as lost packets, is functionally indistinguishable from a loss of communications (until the packets arrive, the communications are still effectively lost).” *Id.* We agree, and we note the Examiner’s findings are also consistent with the description in Appellant’s Specification of problems with the communication link. In particular, the Specification describes communication that is either lost entirely or the bandwidth is “reduced significantly” (Spec. 3:5–10), and then states that the problem with such loss or limitation is that “the local energy resource controller *cannot be controlled* by the remote control unit via the lost or limited communication link” (*id.* at 3:25–27 (emphasis added)). Thus, the communication impairment being described and claimed (whether “loss” or “limitation”) is one in which remote control is lost, which the Examiner finds (and we agree) is disclosed in Forbes.³

Appellant next argues the Examiner’s findings are in error because Forbes fails to disclose monitoring a communication link. Appeal Br. 17.

³ Although the Examiner does not reject the claims on the basis of indefiniteness under § 112, we note that claim 1 recites *both* “loss” and “limitation” of communication, although these conditions are consistently described in the Specification *in the alternative*, as Appellant notes. *See* Reply Br. 4–5. We interpret the claims, as the Examiner does, as reading on a system in which the energy resource controller is adapted to perform the “emulate” function in the event that remote control is lost, which may be due to “loss of communication” and also due to “limitation of communication.” In the event of further prosecution, however, the Examiner may wish to require clarifying amendments.

Appellant contends Forbes' paragraph 125, cited by the Examiner, "makes general references to a 'power loss', but never discloses a monitoring of a communication link" *Id.* (emphasis omitted). We disagree. A claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). As the Examiner finds, and we agree, Forbes may not disclose the exact method of monitoring, but it does disclose actions that occur in the event of "loss of communication," in which event the system will "operate autonomously until communication with a host ALD is re-established." Forbes ¶ 125. The Examiner thus finds monitoring is at least inherently disclosed in Forbes, because Forbes "knows when the communication link is down and when the communication link is re-established." Ans. 3; Forbes ¶ 125.

Appellant next argues Forbes fails to disclose the "energy monitor controller 'emulate[s] [. . .] a continued reception of control parameters and/or control limits from said remote controller to perform a local control of the associated energy resource on the basis of the emulated control parameters and/or control limits according to an applied energy management policy', as recited in independent claim 1." Appeal Br. 17–18 (emphasis omitted). Appellant further contends paragraph 125 of Forbes, cited by the Examiner, "makes only general reference to what occurs in relation to a loss of communication or power," but does not disclose the recited "emulate" functionality. *Id.* We disagree. As the Examiner finds, Forbes discloses that "the local resources controllers, ALCs/ ASCs, are provided with profiles and commands to operate independently until communication is re-established. Thus, emulation of control occurs locally based the energy

management profile.” Ans. 4. The Examiner’s finding regarding Forbes’ disclosure of emulation is consistent with the description of emulation in the Specification, in which the energy resource controller stores “energy management policies” received from a remote controller (Spec. 13:16–26), and the energy resource controller will, in the event of a loss or limitation of communication with the remote controller, “perform[] a local control of the associated energy resource ER” on the basis of the stored policies and parameters (Spec. 15:27–29). Forbes similarly describes storing “a set of profiles or commands to be executed” at the local level “such that they operate autonomously” in the event of a “loss of communication” and “may operate autonomously until communication with a host AL is re-established.” Forbes ¶ 125.

For the foregoing reasons, we are not persuaded of Examiner error in the 35 U.S.C. § 102(a)(2) rejection of claim 1 as anticipated by Forbes, and we, therefore, sustain that rejection, along with the rejection of claims 2–5, 10–12, and 14, which are rejected on the same basis and not argued separately.

B. § 103 Rejection over Forbes and Johnson (Claims 6–9 and 15)

Claim 6 depends from claim 1, and adds that in response to a detected “loss or limitation of communication . . . said policy manager is adapted to generate local control parameters and/or local control limits based on rules of an energy management policy selected from the last set of energy management policies received by the policy manager from said remote controller” Claims 7–9 depend from claim 6. Claim 15 depends from independent claim 14, and contains a similar recitation to claim 6.

We first note that claim 6's recitation of "said policy manager" lacks antecedent basis in claim 1. Claim 3, which depends, through claim 2, from claim 1, recites "a policy manager," but claim 6 depends from claim 1, not claim 3. As noted below, we sustain the Examiner's rejection over the prior art. In doing so, we assume, for sake of compact prosecution, that "said policy manager" is properly recited. In the event of further prosecution, however, the Examiner may require appropriate amendment.

The Examiner finds Forbes discloses a policy manager in the form of the ALD (active load director), which "provides instructions to the energy resource controller, ALC, based on profiles and attributes." Final Act. 10 (citing Forbes ¶ 147). The Examiner finds Forbes does not disclose that the policy manager "is adapted to generate local control parameters based on rules of an energy management policy selected from the last set of energy management policies received . . . ," but finds this limitation is taught by Johnson. *Id.* at 11 (citing Johnson ¶ 51). We agree the Examiner's findings are supported by the cited teachings.

Appellant argues the Examiner's findings are in error because Johnson's disclosure of "holding a setpoint at a last value during a momentary loss of communications cannot be reasonably construed as disclosing the above-cited limitations of dependent claim 6." Appeal Br. 21. Appellant's conclusory assertion that Johnson does not disclose the recited limitation, despite the Examiner's findings to the contrary, amounts to unsupported attorney argument, which is entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984). In a nutshell, Appellant's contention amounts to no more than a terse statement of what Johnson purportedly discloses,

followed by a conclusory statement that such disclosure does not teach or suggest the disputed limitation. Appeal Br. 21; Reply Br. 9. Such conclusory attorney assertions have little or no value in identifying the Examiner's alleged error, and, consequently, have little persuasive value. *See* 37 C.F.R. § 41.37(c)(iv) ("A statement [that] merely points out what a claim recites will not be considered an argument for separate patentability of the claim."); *see also In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011).

Appellant also argues claim 6 would not have been obvious over the combination of Forbes and Johnson because Johnson "fails to remedy the deficiencies of" Forbes as "discussed above regarding independent claim 1." Appeal Br. 21. This argument is also not persuasive of error. As noted above, we are not persuaded the Examiner's findings regarding Forbes are deficient as to claim 1, and the Examiner has not cited Johnson for any limitations recited in claim 1.

For the foregoing reasons, we are not persuaded of Examiner error in the 35 U.S.C. § 103 rejection of claims 6 and 15, which Appellant argues collectively, and we, therefore, sustain that rejection, along with the rejection of claims 7–9, which depend from claim 6 and are not argued separately.

C. § 103 Rejection over Forbes and TLDP (Claim 13)

Claim 13 depends from claim 1, and adds that the "energy resource controller is adapted to detect a loss or limitation of communication of a monitored communication link to said remote controller by monitoring keep alive signals or keep alive messages transmitted by said remote controller to said energy resource controller via said communication link."

The Examiner finds Forbes teaches the energy resource controller of claim 1, but “does not teach monitoring keep alive signals or keep alive messages,” for which the Examiner relies on TDLP. Final Act. 16–17 (citing TDLP p. 2, section 2.3 (“[K]eepalive is used to check if the communication link is available. TCP/IP is understood as a standard for IP messaging.”)). Appellant argues the Examiner’s findings are in error because “TLDP does not disclose a keepalive system that has the ability to detect a ‘limitation of communication’, as recited in dependent claim 13.” Appeal Br. 11.

Appellant does not persuade us of Examiner error. As noted above, the Examiner relies on Forbes (not TLDP) for disclosing detection of a loss as well as a limitation of communication. *See* Ans. 3 (citing Forbes ¶ 125). The Examiner relies on TLDP for the “keepalive” mechanism of monitoring:

Keepalive used over TCP will provide updates of communication link status, whether this is due to a full loss of communication or packet loss on the network, i.e. limited communication, the ACK request or reply would not be received. Thereby, the Keepalive messaging system of TLDP used between the energy resource controller and remote controller of Forbes would detect a loss or limitation of communication of a monitored communication link as required by the claim.

Ans. 5. The Examiner also provides a reason to combine the references that is rational on its face and supported by evidence drawn from the record. Specifically, the Examiner finds “[o]ne of ordinary skill in the art would have been motivated to use keepalive as it is a standard method in TCP/IP, and TCP/IP is a standard for IP messaging.” Final Act. 17. Appellants have not provided persuasive evidence or line of reasoning explaining why such rationale is erroneous or why a person of ordinary skill in the art would not

have reached the conclusions reached by the Examiner. *See DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006) (“[T]he proper question is whether the ordinary artisan possesses knowledge and skills rendering him capable of combining the prior art references.”).

For the foregoing reasons, we are not persuaded of Examiner error in the 35 U.S.C. § 103 rejection of claim 13 and we, therefore, sustain that rejection.

CONCLUSION

The Examiner’s rejections are affirmed.⁴

⁴ As the Examiner has shown that all the claims are unpatentable, we do not also reject Appellant’s claims 1–13 under 35 U.S.C. § 112, first paragraph, as lacking enablement. However, should there be further prosecution of these claims, we note that Appellant’s claims 1–13 are directed to all-encompassing, functionally defined, single-element apparatus claims. Such claims (also referred to as “single means” claims) encompass any and all (present and future) “energy resource controller[s]” for performing the claimed functions no matter what the structure of the controller. Yet, Appellant’s Specification discloses (at most) only the controller known to the inventor. Our reviewing court has concluded that such all-encompassing claims do not comply with the enablement requirement of 35 U.S.C. § 112, first paragraph. *See In re Hyatt*, 708 F.2d 712, 714 (Fed. Cir. 1983) (“[T]he enabling disclosure of the specification [must] be commensurate in scope with the claim under consideration.”). Therefore, should there be further prosecution, claims 1–13 may be subject to an undue breadth rejection for lack of enablement under 35 U.S.C. § 112, first paragraph. *See id.* at 715; *see also* MPEP § 2164.08(a).

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-5, 10-12, 14	102(a)(2)	Forbes	1-5, 10-12, 14	
6-9, 15	103	Forbes, Johnson	6-9, 15	
13	103	Forbes, TLDP	13	
Overall Outcome:			1-15	

TIME PERIOD FOR RESPONSE

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