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Orlando, FL 32817

EXAMINER

SANCHEZ, DIBSON J

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ULRICH VESTERGAARD B. HANSEN
and JANNIK HOEJGAARD

Appeal 2016-002191
Application 13/517,736¹
Technology Center 2600

Before CARLA M. KRIVAK, DANIEL J. GALLIGAN, and
JOSEPH P. LENTIVECH, *Administrative Patent Judges*.

GALLIGAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner’s final rejection of claims 1–9, 11, 12, and 14–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.²

¹ The Appeal Brief identifies Siemens Aktiengesellschaft as the real party in interest. App. Br. 3.

² Our Decision refers to Appellants’ Appeal Brief, filed July 17, 2015 (“App. Br.”); Appellants’ Reply Brief, filed December 8, 2015 (“Reply Br.”); Examiner’s Answer, mailed October 29, 2015 (“Ans.”); and Final Office Action, mailed February 24, 2015 (“Final Act.”).

STATEMENT OF THE CASE

Claims on Appeal

Claims 1 and 18 are independent claims. Claim 1 is reproduced below:

1. An Ethernet switch, comprising:

an input terminal and an output terminal configured to couple the Ethernet switch to a communication network;

a power terminal configured to couple the Ethernet switch to a power supply, and

a control unit being adapted to control an optical path of optical signals within the Ethernet switch,

wherein, in a first operation mode, the control unit is adapted to direct signals received via the input terminal to an internal input terminal of the Ethernet switch, and to direct signals received via an internal output terminal of the Ethernet switch to the output terminal,

wherein, in a second operation mode, the control unit is adapted to direct signals received via the input terminal to the output terminal, and

wherein the control unit is adapted to switch from the first operation mode into the second operation mode in response to a predefined trigger event,

wherein the control unit shifts out of the optical path of the optical signals via gravity and in response to the predefined trigger, and the optical signals bypass the control unit in the second operating mode.

References

Sucharczuk et al.	US 2003/0035641 A1	Feb. 20, 2003
Liao et al.	US 2003/0048981 A1	Mar. 13, 2003
Zirnheld et al.	US 2006/0115268 A1	June 1, 2006
M. Nunoshita and Y. Nomura,	“Optical bypass switch for fiber-optic data bus systems,” <i>Applied Optics</i> , Aug. 1980.	

Examiner's Rejections

Claims 1–7 and 14–18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zirnheld and Nunoshita. Final Act. 5–11.

Claims 8, 9, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zirnheld, Nunoshita, and Liao. Final Act. 11–12.

Claims 11, 12, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zirnheld, Nunoshita, and Sucharczuk. Final Act. 12–14.

ANALYSIS

Issue 1: Did the Examiner err in finding the combination of Zirnheld and Nunoshita teaches or suggests that “the control unit shifts out of the optical path of the optical signals *via gravity* and in response to the predefined trigger, and the optical signals bypass the control unit in the second operating mode,” as recited in claim 1 and similarly recited in claim 18? (Emphasis added).

Appellants contend that the prior art teaches shifting using a spring, not “via gravity.” App. Br. 10–12; Reply Br. 5–7. For example, Appellants argue:

Applicant agrees that gravitation forces exist all around us, i.e., on earth, as the Examiner so eloquently represented. However, what the Examiner fails to appreciate is that the claims do not recite that gravity exists on earth. Instead, the claimed invention requires that a pre-defined trigger causes the unit to shifts [sic] out of the path without the assistance of, e.g., a spring.

App. Br. 11. Appellants further argue that “[t]he Examiner’s suggestion of removing the spring S from the Nuno[shita] device is also impermissible, as removing the spring S would effectively change the function of the device,

and render it inoperable for its intended purpose, which is to use the spring S to swing the ‘control unit’ back.” App. Br. 12 (emphases removed).

Appellants’ arguments are not persuasive because they are not commensurate in scope with the claims as they are presented on appeal and because they are not responsive to the Examiner’s findings. First, Appellants are incorrect that “the claimed invention requires that a pre-defined trigger causes the unit to shifts [sic] out of the path without the assistance of, e.g., a spring.” *See* App. Br. 11. Neither claim 1 nor claim 18 recites that the shifting occurs without the assistance of a spring. Notably, the applicants amended claims 1 and 18 to remove that explicit recitation, which appeared in an earlier set of claims. *See* Response to Office Action, filed Nov. 5, 2014. Prior to that amendment, claim 1 recited that “the control unit falls due to gravity, and without the assistance of a spring element, in response to the predefined trigger, such that the control unit is not in the optical path of the optical signals.” *See id.* Appellants’ arguments for patentability based on limitations that are not recited in the claims are not persuasive of Examiner error.

Second, Appellants’ arguments regarding the Examiner’s alleged “suggestion of removing the spring” (*see* App. Br. 12) are not responsive to the Examiner’s findings in the action from which this appeal is taken because the Examiner does not propose to remove the spring. *See* Final Act. 7–8; Ans. 10 (“[T]he spring S is not being removed and consequently, the switch is kept operable for its intended purpose.”). Rather, Appellants’ arguments appear to be directed to the Examiner’s rejection of an earlier version of Appellants’ claims, which explicitly recited “without the assistance of a spring element.” *See* Non-Final Action, mailed Aug. 5, 2014.

In that rejection, the Examiner relied on a third reference, Morgan (US 3,120,631), to explain that it would have been obvious remove the spring such that the weight of the mirrors would make them fall when power to the magnet was cut off. *See id.* at 6–7.

Appellants’ remaining arguments regarding an alleged failure of the prior art to teach shifting the control unit “via gravity and in response to the predefined trigger” are unavailing. *See* App. Br. 11; Reply Br. 5–6. Appellants argue Nunoshita “does not remotely disclose any orientation for its device, and persons of ordinary skill in the art would not take for granted that it is gravity that causes the iron piece to shift since *Nuno*[shita] teaches the use of the spring S.” App. Br. 11. Although a spring force acts on the mirrors, we agree with the Examiner that gravity acts on the mirrors in Nunoshita as well. *See* Ans. 6–10. The claims do not prohibit additional forces from acting on the control unit, and as discussed above, the restriction “without the assistance of a spring element” was removed from the claim language and, thus, is not a limitation. As the Examiner correctly notes, “gravity is an unavoidable force experienced at all times and by all objects on Earth” (Ans. 9), and, therefore, the shifting of a component “via gravity” does not patentably distinguish over the prior art.

Issue 2: Did the Examiner err in finding the combination of Zirnheld and Nunoshita teaches or suggests, “wherein, in a first operation mode, the control unit is adapted to direct signals received via the input terminal to an internal input terminal of the Ethernet switch, and to direct signals received via an internal output terminal of the Ethernet switch to the output terminal,” as recited in claim 1 and similarly recited in claim 18?

The Examiner maps ports 308 and 306 in Zirnheld to the claimed “internal input terminal” and “internal output terminal,” respectively. Final Act. 6 (citing Zirnheld ¶ 22, Fig. 3a). Appellants argue the Examiner erred because Zirnheld labels port 308 an “output port” and port 306 an “input port.” App. Br. 12–13; Reply Br. 7. We are not persuaded of error because the Examiner has shown Zirnheld teaches directing signals between the various terminals as required by the claims, regardless of what Zirnheld labels any particular terminal. *See* Final Act. 6. Zirnheld describes signals going from input port 312 to port 308 and from port 306 to output port 318 in one mode and, in a bypass mode, going straight from input port 312 to output port 318, which is the flow of signals required by the claims. Zirnheld ¶¶ 22–23, Figs. 3a and 3b. Determining whether a reference discloses particular subject matter is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

We are not persuaded the Examiner erred in concluding the subject matter of claims 1 and 18 would have been obvious over the combination of Zirnheld and Nunoshita. Therefore, we sustain the rejection of these claims under 35 U.S.C. § 103(a), as well as the rejections of claims 2–17, 19, and 20, for which Appellants present no additional persuasive arguments for patentability.

DECISION

We affirm the Examiner’s decision rejecting claims 1–9, 11, 12, and 14–20 under 35 U.S.C. § 103(a).

Appeal 2016-002191
Application 13/517,736

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