

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHANNES LANG and BERNHARD MEITINGER

Appeal 2018-007645
Application 14/060,418
Technology Center 3700

Before MICHAEL C. ASTORINO, KENNETH G. SCHOPFER, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1–7 and 9–11, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b). A hearing was held on September 11, 2020.

We AFFIRM IN PART.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Applicant identifies Liebherr-Hydraulikbagger GmbH as the real party in interest. Appeal Br. 3.

STATEMENT OF THE CASE

Claimed Invention

Appellant's "disclosure relates to an apparatus for controlling/regulating the travel speed of a utility vehicle and a method for same." Spec. ¶ 2.

Apparatus claim 1 and method claim 7 are independent. Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. An apparatus for controlling/regulating a travel speed of a utility vehicle comprising at least one drive motor, at least one hydraulic pump, exactly one control slide valve, at least one hydraulic travel motor, at least one further hydraulic drive as well as at least one controller, wherein during a purely vehicle traveling operation, the travel speed of the at least one hydraulic travel motor is controlled/regulated via a speed of the drive motor and a supply pressure of a pressure medium supplied to the at least one hydraulic travel motor by the at least one hydraulic pump is not restricted by the control slide valve, while the at least one further hydraulic drive does not produce any drive power, and wherein the supply pressure of the pressure medium supplied to the at least one hydraulic travel motor by the at least one hydraulic pump is restricted by the control slide valve only during operation of one or more further consumers of the utility vehicle.

Appeal Br. 32, Claims App.

Rejections

Claims 7 and 9–11 are rejected under 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement.²

² The statement of the rejection inadvertently includes canceled claim 8. Final Act. 3.

Claims 1–5 are rejected under 35 U.S.C. § 103(a) as unpatentable over Nishimura et al. (US 6,564,548 B2, iss. May 20, 2003) (“Nishimura”) and Ohkura et al. (US 5,784,883, iss. July 28, 1998) (“Ohkura”).

Claim 6 is rejected under 35 U.S.C. § 103(a) as unpatentable over Nishimura, Ohkura, and Bacon et al. (US 2008/0264499 A1, pub. Oct. 30, 2008) (“Bacon”).

Claims 7 and 9–11 are rejected under 35 U.S.C. § 103(a) as unpatentable over Nishimura and Aoyagi et al. (US 5,488,787, iss. Feb. 6, 1996) (“Aoyagi”).³

OPINION

Written Description

In rejecting claims 7 and 9–11 under 35 U.S.C. § 112, first paragraph, the Examiner finds the recitation “detecting whether one or more further consumers are operated in addition to the at least one hydraulic travel motor” of independent claim 7 lacks written description support. In particular, the Examiner finds that

the specification remains silent in the device that is used to detect the status of said actuators. The drawings also remains [sic] silent in disclosing the requisite structure that is utilized for the sensing of information as outlined in applicant’s claim 7. Careful review of applicant’s specification discloses in par. 0031 that the controller may include a processor and memory, the memory including non-transitory instructions stored therein for adjusting various actuators in response to sensed value (Par. 0031). However, nowhere in the disclosure does it reveal the specific device that is used and how it achieves the sensing of the status of said actuators. Applicant’s claim language is broad enough to include all and every mechanism, device or way of

³ The Examiner clarified the statement of rejection, which inadvertently included Ohkura. Ans. 9.

achieving “the detection” aspect of operation. To that effect, applicant has not sufficiently demonstrated within the disclosure that applicant was in possession of at least one mechanism of achieving said “detection” aspect of the invention as claimed at the time of filing of the instant application.

Final Act. 3–4; *see also* Ans. 2–4.

Alleging error in the rejection, Appellant argues “that ‘detecting whether further consumers are operated in addition to the at least one hydraulic travel motor’ (i.e., the element in question minus the phrase ‘one or more’) is recited in original claim 7.” Appeal Br. 11; Reply Br. 3–4. Appellant also quotes from paragraph 15 of the Specification, which in relevant part discloses: “wherein the method comprises at least one step in which **it is detected whether further consumers are operated in addition to the at least one hydraulic travel motor**” (Appeal Br. 12). Appellant argues that a skilled artisan would have recognized that Appellant had possession of the claimed subject matter. *Id.* In support of this argument, Appellant relies on statements in co-inventor Bernhard Meitinger’s Declaration, which disclose in part that

a person of ordinary skill in the art at the time of the invention would have understood that a controller of a utility vehicle comprising at least one hydraulic travel motor and further consumers could receive a signal from sensors at each of the at least one hydraulic travel motor and the further sensors at consumers indicating its current operating state (e.g., operating or not operating), and could thereby detect whether further consumers are operated in addition to the hydraulic travel motor.

Id. We are not persuaded by Appellant’s arguments.

The first paragraph of 35 U.S.C. § 112 contains a written description requirement that is separate and distinct from the enablement requirement. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1340 (Fed. Cir. 2010) (en banc). To satisfy the written description requirement, the specification must describe the claimed invention in sufficient detail such that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1562–63 (Fed. Cir. 1991). Specifically, the specification must describe the claimed invention in a manner understandable to a person of ordinary skill in the art and show that the inventor actually invented the claimed invention. *Id.* at 1562–63; *Ariad*, 598 F.3d at 1351.

“Although many original claims will satisfy the written description requirement, certain claims may not.” *Ariad*, 598 F.3d at 1349; *see also Lizard Tech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1343–46 (Fed. Cir. 2005); *Regents of the University of California v. Eli Lilly & Co.*, 119 F.3d 1559, 1568 (Fed. Cir. 1997). For instance, generic claim language in the original disclosure does not satisfy the written description requirement if it fails to support the scope of the genus claimed. *Ariad*, 598 F.3d at 1350; *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 968 (Fed. Cir. 2002) (holding that generic claim language appearing *in ipsius verbis* in the original specification did not satisfy the written description requirement because it failed to support the scope of the genus claimed); *Fiers v. Revel*, 984 F.2d 1164, 1170 (Fed. Cir. 1993) (rejecting the argument that “only similar language in the specification or original claims is necessary to satisfy the written description requirement”).

We agree with the Examiner that independent claim 7 recites aspects that fail to comply with the written description requirement. Specifically, because the claim language “detecting whether one or more further consumers are operated in addition to the at least one hydraulic travel motor” is a genus, and the Specification does not disclose sufficient species to support the boundaries of the claimed genus, the recited functional claim language does not have sufficient written description support to satisfy 35 U.S.C. § 112, first paragraph.

Appellant’s argument that the aforementioned functional claim language has written description support in original claim 7 and paragraph 15 of the Specification is not dispositive because the disclosure literally repeats the functional claim language *in ipsius verbis*. *Ariad*, 598 F.3d at 1350; *Enzo Biochem*, 323 F.3d at 968. The test for compliance with this requirement is whether the application disclosure reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the application filing date (*Ariad*, 598 F.3d at 1351), not whether a skilled artisan would understand the various way in which the detecting function is performed. The problem of written description compliance is especially acute with genus claims that use functional language to define the boundaries of a claimed genus, even when such claims are original claims and thus part of the original specification. *Id.* at 1349 (“[A]n adequate written description of a claimed genus requires more than a generic statement of an invention’s boundaries.”). Compliance with the written description requirement ensures that when an inventor claims a genus by its function, the specification recites sufficient materials to accomplish that function. *Id.* at 1352–53.

We next determine whether the scope of the functional claim language in claim 7 is a genus that covers all species for performing the claimed function. *Id.* at 1349. Factors to consider include (a) whether the claim itself recites limitations as to how the function is performed; and (b) whether the Specification identifies a way of performing the claimed function, such as a specific type of structure or an algorithm, that defines the scope of the functional claim language, without importing limitations from the Specification into the claim. *Lizard Tech*, 424 F.3d at 1346; *In re Hayes Microcomputer Prods., Inc. Patent Litigation*, 982 F.2d 1527, 1534 (Fed. Cir. 1992).

We find that claim 7 fails to recite any limitations as to how the claimed function is performed. The preamble of the claim identifies various components of an apparatus without identifying any of those components for performing the claimed detecting function. The scope of the limitation “detecting whether one or more further consumers are operated in addition to the at least one hydraulic travel motor” covers all species for performing the claimed function, and the Specification does not describe *any* species for the claimed detecting. As the Examiner observes, the Specification does not identify any mechanism for performing the claimed function. In other words, the Specification does not sufficiently specify how the invention achieves the claimed function. Because the Specification does not disclose species sufficient to support a claim to the functionally defined genus, claim 7 fails to meet the written description requirement of 35 U.S.C. § 112, first paragraph. *Lizard Tech*, 424 F.3d at 1346 (“[T]he description of one method for creating a seamless DWT does not entitle the inventor . . . to claim any and all means for achieving that objective.”); *Ariad*, 598 F.3d at

1349 (“[T]he specification must demonstrate that the applicant has made a generic invention that achieves the claimed result and do so by showing that the applicant has invented species sufficient to support a claim to the functionally-defined genus.”).

Accordingly, we sustain the Examiner’s rejection of claims 7 and 9–11 as failing to comply with the written description requirement.

Obviousness

Independent claim 1 requires, in part, “an apparatus for controlling/regulating a travel speed of a utility vehicle comprising . . . exactly one control slide valve.” Appeal Br. 32, Claims App. Independent claim 7 also requires “an apparatus comprising . . . exactly one control slide valve.” *Id.* at 33, Claims App.

In rejecting claim 1 as unpatentable over Nishimura and Ohkura, the Examiner finds Nishimura’s apparatus shown in Figure 2 teaches the claimed apparatus for controlling/regulating a travel speed of a utility vehicle, including “exactly one control slide valve formed by valve (8)” (Final Act. 4).

Appellant contends that the previous rejection cited valves 6, 7, and 8 of Nishimura as forming a control slide valve, but the Examiner “now asserts that valve 8 alone shows the claimed exactly one control slide valve.” Appeal Br. 23. Appellant argues the rejection errs because the Examiner “has not established that a skilled artisan would interpret Nishimura as having exactly one control slide valve 8, seeing as valves 6, 7, and 8 appear to be identical.” *Id.*

In response to Appellant’s argument, the Examiner states that

valve (8) is exactly one control slide valve that supplies fluid to motor (5). The fact that there are other valves present within the device of Nishi doesn't negate the fact that valve (8) is exactly one control slide valve that supplies fluid to motor (5) (see Fig 2 of Nishi). It appears Applicant is trying to claim "only one valve" but instead claimed "exactly one valve." As such, valve (8) can be correctly be interpreted as exactly one valve that supplies fluid to motor (5).

Ans. 7. We are persuaded of error.

Claim 1 is directed to "a utility vehicle comprising . . . exactly one control slide valve." Reply Br. 9. Claim 1 requires "exactly one control slide valve" as part of its apparatus, whereas all the other components of the apparatus are prefaced with "at least one." *See* Appeal Br. 32, Claims App. We agree with Appellant that one of ordinary skill in the art would interpret "exactly one" as meaning "one and only one." Reply Br. 9.

The Examiner's interpretation of the claim language relies on an unreasonable distinction between "only one valve" and "exactly one valve." *See supra*. The Examiner ostensibly contends that if the claim recited "only one control slide valve," Appellant's argument as to Nishimura's teaching of multiple operating valves (6, 7, and 8) regulating the flow of hydraulic fluid from the hydraulic pump to the traveling motor would be accurate. We find the plain language of the claim, which is consistent with Appellant's drawing of the claim in Figure 2, supports Appellant's interpretation that apparatus claim 1 requires one and only one control slide valve regulating the flow of hydraulic fluid from the hydraulic pump to the traveling motor. Reply Br. 9. Because the Examiner's finding in Nishimura relies on an unreasonable interpretation of the term "exactly one" control slide, which is inconsistent with Appellant's Specification, we do not sustain the rejection

of independent claim 1, and independent claim 7, the rejection of which relies on the same deficient finding in Nishimura. *See* Final Act. 7. For the same reasons, we do not sustain the rejections of claims 2–5 and 9–11, which depend from claim 1 and claim 7, respectively. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“dependent claims are nonobvious if the independent claims from which they depend are nonobvious”). We also do not sustain the rejection of dependent claim 6, because the Examiner does not rely on Bacon to remedy the above noted deficiency in Nishimura as to claim 1.

CONCLUSION

The rejection of claims 7 and 9–11 under 35 U.S.C. § 112, first paragraph, is affirmed.

The rejections of claims 1–7 and 9–11 under 35 U.S.C. § 103(a) are reversed.

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
7, 9–11	112, ¶ 1	Written Description	7, 9–11	
1–5	103(a)	Nishimura, Ohkura		1–5
6	103(a)	Nishimura, Ohkura, Bacon		6
7, 9–11	103(a)	Nishimura, Aoyagi		7, 9–11
Overall Outcome			7, 9–11	1–6

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 IN PART