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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FREDERIC STEFAN, UWE GUSSEN,
CHRISTOPH ARNDT, and RAINER BUSCH

Appeal 2019-002974
Application 14/994,606
Technology Center 3600

Before PHILIP J. HOFFMANN, CYNTHIA L. MURPHY, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

HOFFMANN, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner's rejection of claims 1–16. We have jurisdiction under 35 U.S.C.
§ 6(b).

We REVERSE, and ENTER NEW GROUNDS OF REJECTION
pursuant to 37 C.F.R. § 41.50(b).

¹ We use the word “Appellant” to refer to “applicant” as defined in
37 C.F.R. § 1.42. Appellant identifies the real party in interest as Ford
Global Technologies, LLC. Appeal Br. 1.

According to Appellant, the invention “relates to a method for supporting a maneuvering procedure of a motor vehicle and to a driver assistance system.” Spec. ¶ 2. Below, we reproduce independent claim 1 as representative of the appealed claims.

1. A method of operating a parking assistance system to perform an autonomous parking maneuver of a vehicle, comprising:

decreasing a parking maneuver setpoint speed of the vehicle used during the parking maneuver in reaction to input to the system indicating intention to park the vehicle with at least one wheel of the vehicle on a curb that is undetected by a sensor providing information to the system.

REJECTIONS AND PRIOR ART

The Examiner rejects the claims as follows:

- I. Claims 1, 3, 12, and 14 under 35 U.S.C. § 103 as unpatentable over Volker (EP 2 327 574 A1, pub. June 1, 2011)² and Gieseke et al. (US 2015/0344028 A1, pub. Dec. 3, 2015) (“Gieseke”);
- II. Claims 2, 5–8, 10, 11, 15, and 16 under 35 U.S.C. § 103 as unpatentable over Volker, Gieseke, and Shen et al. (US 2014/0121883 A1, pub. May 1, 2014) (“Shen”);
- III. Claims 4 and 13 under 35 U.S.C. § 103 as unpatentable over Volker, Gieseke, and Ichinose et al. (US 2003/0062228 A1, pub. Apr. 3, 2003) (Ichinose”); and
- IV. Claim 9 under 35 U.S.C. § 103 as unpatentable over Volker, Gieseke, Shen, and Ichinose.

² The Examiner apparently relies on an English-language translation.

ANALYSIS

Rejections I–IV—Obviousness rejections of the claims

As set forth above, independent claim 1 recites the following:

1. A method of operating a parking assistance system to perform an autonomous parking maneuver of a vehicle, comprising:

decreasing a parking maneuver setpoint speed of the vehicle used during the parking maneuver in reaction to input to the system indicating intention to park the vehicle with at least one wheel of the vehicle on a curb that is undetected by a sensor providing information to the system.

Appeal Br., Claims App. (emphases added). The Examiner relies on Volker to disclose the claimed setpoint speed. *See, e.g.*, Final Action 4–6.

Appellant argues that the Examiner errs because, although Volker discloses “braking the vehicle from a speed to maintain a suitable speed for maneuvering, wherein the braking . . . reduces a speed of the vehicle, [which the Examiner] . . . interpret[s] as decreasing [a] parking maneuver setpoint speed of the vehicle used during the parking maneuver” as claimed (Answer 6), this is not decreasing a *setpoint* speed (*see* Reply Br. 1–3) (*n.b.* at 2, “The Examiner’s attempt to eliminate ‘setpoint’ from ‘setpoint speed’ based on the reference relied upon is clearly unreasonable and legally incorrect.”).

As explained below, we are unable to determine what is meant by the phrase “*setpoint* speed,” and thus cannot assess the merits of the Examiner’s rejections of claims 1–16 under § 103.³ Consequently, we *pro forma* do not

³ Although above we discuss the recitations of claim 1, each of the remaining independent claims—claims 6 and 12—recites “a setpoint speed,” and thus the above analysis applies equally to all of the claims.

sustain the Examiner's obviousness rejections, because sustaining any such rejection would necessarily be based upon assumptions as to the meaning of the claims' recitations. *See In re Steele*, 305 F.2d 859, 862–63 (CCPA 1962) (addressing an obviousness rejection).

New ground of rejection based on indefiniteness

Based on our review of the record, including Appellant's Specification, Appeal Brief, and Reply Brief, we are unable to determine what is meant by the phrase "setpoint speed," and, in particular, how the claimed setpoint speed differs from another speed at which a vehicle travels during a parking maneuver. Appeal Br., Claims App. (Claim 1) (emphasis added). Appellant does not proffer a definition explaining this difference, but instead argues that "[a]ny suggestion that 'setpoint speed' requires an explicit definition in the [S]pecification should also be summarily rejected. Terms such as 'setpoint' are ordinary and customary and well understood by those of ordinary skill in the art. No explicit definition is required." Reply Br. 2.

An explicit definition of "setpoint speed" in the Specification may not be necessary, and the word "setpoint" may have an ordinary and customary meaning. But the Specification must still convey what the term "setpoint speed" means in the context of the present invention. According to the Appellant, the claimed "setpoint speed" differs from the "suitable speed for maneuvering" disclosed in the prior art. *See* Appeal Br. 3, Reply Br. 4. But Appellant does not point to, and we do not see, an indication of this difference in the Specification. *See* Spec. ¶¶ 8, 11, 12, 15, 35, 36, 38, Fig. 2A.

Because we cannot determine what is meant by the claimed setpoint speed, claim 1 as currently pending is ambiguous, and fails to meet the definiteness requirement of 35 U.S.C. § 112(b). *See In re Packard*, 751 F.3d 1307, 1310–13 (Fed. Cir. 2014) (“[A] claim is indefinite when it contains words or phrases whose meaning is unclear,” i.e., “ambiguous, vague, incoherent, opaque, or otherwise unclear in describing and defining the claimed invention.”) *See also In re McAward*, No. 2015-006416, 2017 WL 3669566, at *3 (PTAB Aug. 25, 2017) (precedential). Further each of the other claims under appeal—claims 2–16—either depends from claim 1 or includes a similar recitation involving a “setpoint speed.” Thus, the above analysis is equally applicable to all of the pending claims.

Accordingly, for the reasons given above, and pursuant to our authority under 37 C.F.R. § 41.50(b), we determine that claims 1–16 are indefinite under 35 U.S.C. § 112(b), and accordingly enter a new ground of rejection.

New ground of rejection based on lack of written description

Although not entirely clear from Appellant’s Specification and figures, with reference to claim 1 for example, it appears that Appellant’s claimed method of operating a parking assistance system is implemented by a computer, which achieves the claimed function of decreasing a parking maneuver setpoint speed. *See, e.g.*, Spec. ¶ 3. The U.S. Patent and Trademark Office recently published guidance related to functional claim recitations and § 112. *See Examining Computer-Implemented Functional Claim Limitations for Compliance With 35 U.S.C. 112*, 84 Fed. Reg. 57 (Jan. 7, 2019) (“Guidance”). The Guidance explains that

[f]or computer-implemented functional claims, the determination of the sufficiency of the disclosure will require an inquiry into the sufficiency of both the disclosed hardware and the disclosed software (*i.e.*, “how [the claimed function] is achieved,” *Vasudevan [Software, Inc. v. MicroStrategy, Inc.]*, 782 F.3d 671, 683 (Fed. Cir. 2015)) . . .), due to the interrelationship and interdependence of computer hardware and software. When examining computer-implemented, software-related claims, examiners should determine whether the [S]pecification discloses the computer and the algorithm(s) that achieve the claimed function in sufficient detail that one of ordinary skill in the art can reasonably conclude that the inventor possessed the claimed subject matter at the time of filing.

Guidance, 84 Fed. Reg. at 62. Accordingly,

[i]f the [S]pecification does not provide a disclosure of the computer and algorithm(s) in sufficient detail to demonstrate to one of ordinary skill in the art that the inventor possessed the invention that achieves the claimed result, a rejection under 35 U.S.C. [§] 112(a) for lack of written description must be made.

Id. In this case, it is not apparent to us that Appellant’s Specification and figures disclose a computer and algorithm in sufficient detail to demonstrate that the inventors possessed the invention recited in claim 1. Thus, for the reasons given above, and pursuant to our authority under 37 C.F.R.

§ 41.50(b), we determine that these claims do not comply with the written-description requirement of 35 U.S.C. § 112(a), and accordingly enter a new ground of rejection.⁴

⁴ We do not reach the question of whether claims 1–16 comply with the enablement requirement, particularly in view of the requirements as set forth in the Guidance. The Guidance indicates that enablement issues may arise with “computer-implemented functional claims that recite only the idea of a solution or outcome to a problem but fail to recite details of how the solution or outcome is accomplished.” Guidance, 84 Fed. Reg. at 57. As such, our silence on this issue should not be interpreted as a determination that the claims are enabled.

CONCLUSION

We REVERSE *pro forma* the Examiner’s obviousness rejections of claims 1–16.

We ENTER NEW GROUNDS OF REJECTION for claims 1–16 as indefinite and for failing to comply with the written-description requirement.

In summary:

| Claims Rejected | 35 U.S.C. § | Reference(s)/Basis | Affirmed | Reversed | New Ground |
|------------------------|-------------|---------------------------------|----------|------------------------|------------|
| 1, 3, 12, 14 | 103 | Volker, Gieseke | | 1, 3, 12, 14 | |
| 2, 5–8, 10, 11, 15, 16 | 103 | Volker, Gieseke, Shen | | 2, 5–8, 10, 11, 15, 16 | |
| 4, 13 | 103 | Volker, Gieseke, Ichinose | | 4, 13 | |
| 9 | 103 | Volker, Gieseke, Shen, Ichinose | | 9 | |
| 1–16 | 112(b) | Indefiniteness | | | 1–16 |
| 1–16 | 112(a) | Written description | | | 1–16 |
| Overall Outcome | | | | 1–16 | 1–16 |

As set forth above, this Decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b) (2008), which provides that “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new [e]vidence relating to the claims so rejected, or both, and have the matter

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reconsidered by the examiner, in which event the prosecution will be remanded to the [E]xaminer. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

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).

REVERSED; 37 C.F.R. § 41.50(b)