

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Gerd Winkler, Andreas Knueppel, and Gerald Schicker

Appeal 2007-3302
Application 10/881,371
Technology Center 3600

Decided: December 12, 2007

Before WILLIAM F. PATE, III, TERRY J. OWENS and JOHN C. KERINS,
Administrative Patent Judges.

KERINS, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Gerd Winkler, Andreas Knueppel and Gerald Schicker (Appellants) seek our review under 35 U.S.C. § 134 of the non-final rejection¹ of claims 20-26 under 35 U.S.C. § 112, first paragraph, as failing to meet the enablement requirement thereof. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

¹ The claims on appeal have been twice rejected. As such, we have jurisdiction to address the case on the merits. *Ex parte Lemoine*, 46 USPQ2d 1432 (Bd. Pat. App. & Int. 1995).

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In the non-final action appealed from, Claims 27-36 were allowed by the Examiner. A rejection of Claims 37-39 under 35 U.S.C. § 112, first paragraph, based on lack of enablement, was withdrawn by the Examiner in the course of this appeal. A Terminal Disclaimer has been filed with respect to Claims 37-39, thereby obviating a rejection based upon obviousness-type double patenting.

SUMMARY OF DECISION

We REVERSE and ENTER A NEW GROUND OF REJECTION UNDER 37 C.F.R. § 41.50(b).

THE INVENTION

Appellants' claimed invention is to a method for determining characteristics of vehicle occupants, in order to classify the vehicle occupants. Claim 20, reproduced below, is representative of the subject matter on appeal.

20. A method for determining vehicle occupant characteristics to classify vehicle occupants, comprising the steps of:

- (a) establishing a first position for an occupant sensor or a seat occupant;
- (b) recognizing a second position that is different than the first position;

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(c) using an information factor to determine a difference between the first and second positions; and

(d) generating a correction factor to correct for the difference.

THE REJECTION

The following rejection is before us for review:

1. Claims 20-26 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement therein.

ISSUES

A first issue before us is whether Appellants have demonstrated that the rejection of Claims 20-26, as failing to meet the enablement standard of 35 U.S.C. § 112, is in error. A further issue that we find to exist is whether Claims 20-26 meet the “written description” requirement of 35 U.S.C. § 112.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Appellants' disclosure, as a whole, describes a method for determining vehicle occupant characteristics, in order to classify the vehicle occupants, in which:

(a) a first occupant position is characterized and classified by obtaining a three-dimensional profile of the occupant, generated by a CPU based upon occupant sensor data;

(b) that three-dimensional profile is then compared to an "information factor" stored in the CPU,

(c) a "correction factor" is generated when a variance between the three-dimensional profile and the "information factor" reaches a pre-determined amount,

(d) the "correction factor" is used to provide a corrected three-dimensional profile, as necessary, and

(e) the thus-obtained three-dimensional profile is employed to classify the vehicle occupant to thereby control a vehicle restraint system.

(Specification, ¶[25], ¶[29]).

2. Appellants' disclosure describes performing the above method only a single time, in response to an occupant being present in a vehicle, to obtain a single occupant classification, *e.g.*, adult, child, infant, close to, or far from, an airbag deployment area. (Specification, ¶[21], ¶[29]).

3. Appellants, by virtue of making passing reference to "monitor[ing]" the position of the occupant within the vehicle, inherently disclose that the above-described method may be performed in an ongoing, iterative manner.

(Specification, ¶[17]).

4. Appellants' disclosure does not set forth any definitive step of specifically acknowledging or determining, in the system and method, when any new or different occupant sensor data has been obtained, nor do Appellants disclose that any method steps different from those set forth above should be performed upon any "determination" that new or different occupant sensor data has been obtained.

5. Appellants' disclosure lacks any explicit or implicit description of a method step in which any direct or indirect comparison is made between two different positions of a seat occupant. In particular, Appellants' disclosure lacks any teaching of using an "information factor" to determine a "difference" between any two different seat occupant positions.

6. Appellants' disclosure does not describe any method in which a "correction factor" is or may be generated for anything other than a detected variance between a single, specifically generated three-dimensional profile, which is indicative of a single position of a seat occupant, and a stored "information factor". In particular, the disclosure contains no teaching that a correction factor is or may be generated based upon determining a difference between two different seat occupant positions.

PRINCIPLES OF LAW

Insofar as the enablement requirement is concerned, the dispositive issue is whether Appellants' disclosure, considering the level of ordinary skill in the art as of the date of Appellants' application, would have enabled a person of such skill to

make and use Appellants' invention without undue experimentation. *In re Strahilevitz*, 668 F.2d 1229, 1232 (CCPA 1982). In calling into question the enablement of Appellants' disclosure, the Examiner has the initial burden of advancing acceptable reasoning inconsistent with enablement so as to shift the burden to Appellants to show that one of ordinary skill in the art could have practiced the claimed invention without undue experimentation. *Id. See also In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971).

Factors to be considered in determining whether a disclosure would require undue experimentation include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

The written description requirement of 35 U.S.C. § 112, is a separate and distinct requirement from the enablement requirement, *University of Rochester v. G.D. Searle & Co.*, 358 F.3d 916 (Fed. Cir. 2004). That a claim may pass muster in an enablement analysis does not compel a finding that the claim also meets the written description requirement. *In re Curtis*, 354 F.3d 1347 (Fed. Cir. 2004).

Compliance with the written description requirement is a question of fact. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). In order to comply with the written description requirement, the applicant's disclosure must "convey with reasonable clarity to those skilled in the art that, as of the filing date

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sought, he or she was in possession of the [claimed] invention.” *Vas-Cath, Inc.* at 1563-64.

An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). If the applicant claims embodiments of an invention that are completely outside the scope of the specification, then the examiner or Board need only establish this fact to make out a prima facie case. *In re Alton*, 76 F.3d 1168, 1175 (Fed. Cir. 1996); *In re Wertheim*, 541 F.2d 257 (CCPA 1976).

ANALYSIS

Rejection under 35 U.S.C. §112, first paragraph-enablement requirement

Rejected Claims 20-26 are directed to a method for determining vehicle occupant characteristics, in order to classify the vehicle occupants. The claims present a first step of, “establishing a first position for an occupant sensor *or a seat occupant...*” (App. Br., Claims Appendix)(emphasis added). The Examiner’s findings and reasoning in support of the rejection based upon alleged lack of enablement are directed to the claims as they relate to performing the method in connection with the position of the seat occupant, and not as they relate to the alternative of performing the method in connection with the position of an occupant sensor. (Answer 3).

The Examiner's rationale (Answer 3-5) is summarized as follows:

- the specification does not describe how to "recognize a second position that is different than the first position"

- the specification does not describe how to use "an information factor to determine a difference between the first and second positions", nor how to "generat[e] a correction factor to correct for [this] difference"

- the "information factor" is never disclosed as being used as claimed

- the disclosure of the information factor being used to compare to a three-dimensional profile does not give one of ordinary skill in the art enough description to know how to use the information factor to determine the difference between positions and generate a correction factor

- Appellants' disclosure does not describe the generation of a correction factor such that one of ordinary skill in the art would know how to use an information factor to determine a difference between the first and second positions, and to generate a correction factor to correct for the difference.

Appellants' reply is to the effect that, notwithstanding any lack of explicit disclosure of certain of these features, persons of ordinary skill in the art would be able to perform the claimed method, given what the specification does disclose.

Neither the Examiner nor Appellants address in any detail what experimentation, if any, might be required in order to practice the invention as presently claimed, and more importantly, whether any such experimentation might

rise to the level of being “undue experimentation”, the ultimate test of enablement. It is not, however, Appellants’ burden initially to establish that its claims are enabled. Rather, the Examiner must advance evidence or reasoning showing that undue experimentation would be required in order to bridge any gap between the teachings of Appellants’ disclosure and the practice of the claimed invention by those of ordinary skill in the art.

Several of the Examiner’s assertions summarized above posit that Appellants’ disclosure is not adequate to inform a person of ordinary skill in the art to know how to perform certain of the steps of the claims. These are not accompanied by evidentiary support or a sound statement of reasoning supporting the conclusions. Further, to the extent that the assertions are factual and not conclusory, they are directed only to the second enumerated *Wands* factor, namely, the amount of guidance or direction provided by Appellants’ disclosure. While this factor is indeed important, it is not by itself determinative, in the present situation, of a finding that undue experimentation on the part of persons of ordinary skill in the art would be required in order to practice the claimed invention.

Thus, even if we accept that all of the Examiner’s factual assertions are accurate, those assertions do not establish a prima facie case that the claims are not enabled by Appellants’ disclosure. We therefore find that the Examiner has not met the initial burden of establishing a prima facie showing that Claims 20-26 are not enabled by Appellants’ disclosure.

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The rejection of Claims 20-26 under 35 U.S.C. § 112, first paragraph, as failing to meet the enablement requirement, is reversed.

Rejection under 35 U.S.C. § 112, first paragraph (written description)-New Ground of Rejection

We enter the following new ground of rejection, under the provisions of 37 C.F.R. § 41.50(b):

Claims 20-26 are rejected under 35 U.S.C. § 112, first paragraph, as failing to meet the written description requirement.

We are mindful, in entering this new ground of rejection, that these claims were previously rejected on this same statutory basis, and that such previous rejections were withdrawn prior to appeal. Nonetheless, our review of the record on appeal, principally our consideration of, and agreement with, several of the assertions made by the Examiner in the attempt to support a rejection based upon lack of enablement, leads us inescapably to a finding that Appellants' disclosure does not evidence that they were in possession of the claimed invention at the time the application was filed.

Claim 20 effectively recites two different modes in which the claimed method may be practiced, one in which sensor positions are established and one in which seat occupant positions are established. (App. Br., Claims Appendix). It is the latter mode, when taking into account the claim in its entirety, that Appellants' specification does not support.

More specifically, the method in Claim 20 includes performing the essentially preliminary steps of establishing a first position for a seat occupant and recognizing a second position that is different than the first position. As discussed in greater detail below, these steps find adequate written support in Appellants' original disclosure.

The method of Claim 20 requires the further steps of: “(c) using an information factor to determine a difference between the first and second positions; and (d) generating a correction factor to correct for the difference.” (App. Br., Claims Appendix). With these steps, Appellants veer well off the course established in their original disclosure, and find themselves landing outside the bounds of what that disclosure adequately describes.

Turning to the actual disclosure, Appellants describe a method including having a CPU generate a three-dimensional profile related to the position of the seat occupant, using occupant measurement signals obtained from sensors, for “occupant classification”. (Finding of Fact 1) Appellants further disclose that the CPU compares the generated three-dimensional profile to an “information factor” stored in the CPU, and that the CPU will generate a correction factor if the three-dimensional profile varies from the information factor by a predetermined amount. *Id.* Finally, if correction is required, the CPU generates a corrected three-dimensional profile, and, if not, the CPU maintains the originally generated profile. *Id.* The profile (corrected or uncorrected) is used to classify the occupant. *Id.*

While the first operative step of Claim 20 (establishing a first position for a seat occupant) clearly finds adequate written support in the specification, finding

adequate written support for the second operative step of “recognizing a second position that is different than the first position” requires us to look beyond what Appellants explicitly describe in their disclosure. Adhering to the explicit description, the disclosed method steps are performed only one time, in response to an occupant being present in the vehicle, and the method obtains only an initial occupant classification, *e.g.*, adult, child, infant, occupant close to, or far from, airbag deployment area. (Finding of Fact 2).

Notwithstanding this particular focus, Appellants point out that the specification refers to “monitoring” the position of the occupant within the vehicle, and contend that this amounts to a disclosure that the disclosed method and system is capable of sensing changes in sensor data indicative of a position (second position) that is different than the first position. (App. Br. 4). There is, however, an utter lack of additional description regarding the operation of the system and method as the sensor data continues to be “monitored”. (Finding of Fact 4). Thus, while we conclude that the inclusion of a passing reference to the “monitoring” of sensor data suffices to inherently describe the capability of the disclosed method to process sensor data subsequent to the initial sensing, the absence of any further disclosure leads us to further conclude that this amounts to nothing more than an inherent disclosure of an iterative process involving only the explicitly disclosed method steps.²

² Claim 20 recites that the process is to involve “recognizing” a second position that is different from the first position. Appellants’ disclosure does not explicitly include any affirmative “recognition” of the second position. However, the CPU

In this inherently disclosed process, any new sensor values would be used by the CPU to generate a new three-dimensional profile to classify the occupant. Continuing to follow the disclosed method, that profile is compared to the information factor, and if there is a predetermined amount of variance between the new three-dimensional profile and the information factor, a corresponding (new) correction factor is generated by the CPU. The new three-dimensional profile is then either corrected, or not, and the occupant is classified based upon this subsequent three-dimensional profile.

It is evident from the foregoing that Appellants' specification nowhere discloses or contemplates having the CPU employ the stored "information factor" to determine what difference exists between the previously obtained data or profile (indicative of the first position)³ and the subsequently obtained data and profile

will inherently "recognize" new sensor data that may differ from previously obtained sensor data. Of primary significance here is that Appellants do not disclose that such recognition should or would trigger any change in the performing of the method as actually disclosed, nor that any method steps different from those discussed above would be performed upon the receipt by the CPU of new or different occupant sensor data. (Finding of Fact 3).

³ Because Appellants only explicitly disclose a first iteration of the method to classify the seat occupant, their specification is utterly silent regarding what, if anything, the CPU might do with the previously obtained three-dimensional profile. Since that profile was, however, generated from sensor data that are no longer being sensed by the CPU and are no longer representative of a current position of the seat occupant, we find it logical to conclude that the CPU would disregard (if not outright delete) the earlier profile and data in favor of the

(indicative of the second position). (Finding of Fact 5). The concept underlying such a method, and the outcome of such a method, are quite unlike those which are actually proposed and obtained by Appellants. The concept, outcome, and the method itself, go well beyond the scope of Appellants' disclosure. Appellants' disclosure is devoid of any evidence that they were in possession of a method which includes a step of "using an information factor to determine a difference between the first and second positions".

Further, Appellants' specification and drawings disclose that a "correction factor" is generated based upon a comparison of a three-dimensional profile generated by a CPU from sensor data, to a stored "information factor". The correction factor is disclosed as being used to correct the three-dimensional profile, which is indicative of the position of a seat occupant. (Finding of Fact 1).

In the inherently disclosed iterative process, a "correction factor" is potentially generated each time the CPU generates a new three-dimensional profile (based upon obtaining new sensor data, as a result of monitoring with the sensors), when the new profile is compared to the stored information factor. The thus-generated "correction factor" relates to correcting the new profile relative to the information factor.

Nowhere does the specification describe, either explicitly or inherently, that this "correction factor" would or should have any relation to a previously-

subsequent, current, profile. There is nothing in Appellants' disclosure to suggest its use in any comparison to the current data and profile.

determined position of the seat occupant, nor to any difference between that previously determined position and a currently established position. (Finding of Fact 6). Appellants' disclosure thus does not evidence that they were in possession of an inventive method that includes a step of "generating a correction factor to correct for the difference" between a first and a second position of a seat occupant.

The method of Claim 20 is thus unpatentable in view of the written description requirement set forth in the first paragraph of 35 U.S.C. § 112.

Claims 21-26 depend from Claim 20, and thus necessarily include all limitations present in Claim 20. These claims therefore also disclose methods that fail to meet the written description requirement of 35 U.S.C. § 112.

CONCLUSIONS OF LAW

We conclude that the Examiner has not established a prima facie showing that Claims 20-26 on appeal fail to meet the enablement standard set forth in the first paragraph of 35 U.S.C. § 112. We further conclude that Appellants' specification does not evidence that Appellants were in possession of the method set forth in Claims 20-26 as of the time that the application was filed, and, therefore, that those claims are not patentable, in view of the written description requirement in 35 U.S.C. § 112.

ORDER

The decision of the Examiner to reject Claims 20-26 as failing to meet the enablement standard set forth in 35 U.S.C. § 112, is reversed.

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A new ground of rejection of Claims 20-26 under 35 U.S.C. § 112, first paragraph, based on a failure to meet the “written description” requirement, will be entered pursuant to our authority under 37 C.F.R. § 41.50(b). That section provides that, “[A] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

Regarding the new ground of rejection, Appellant must, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, exercise one of the following options with respect to the new ground of rejection, in order 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 evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . ; or

(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).

REVERSED; 37 C.F.R. § 41.50(b)

JRG

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