

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT P. SCARINGE and NIDAL A. SAMAD

Appeal No. 1997-4234
Application 08/423,211

HEARD - November 14, 2000

Before WINTERS, ROBINSON, and ADAMS, Administrative Patent Judges.

ROBINSON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-27 and 29-30. Claim 28 stands withdrawn from consideration by the examiner and is not presented on appeal. Claims 1 and 30 are illustrative of the claims on appeal and read as follows:

1. A test kit, comprising a hollow transparent member open at upstream and downstream ends thereof, and an acid indicator assembly having a substantially sheet-like substrate defining a free cross section disposed along a flow of gaseous refrigerant through the member removably and securely held within the member, wherein the upstream end of the member is configured to be held temporarily against a service valve at

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one of a compressor suction side inlet of a refrigeration system and a recovered refrigerant vessel for permitting the flow of gaseous refrigerant through the member and over an outer surface of the substrate into the atmosphere.

30. A test kit, comprising a hollow transparent member having openings at upstream and downstream ends thereof, and means operatively held only within the member for passing a gaseous refrigerant sample from a refrigeration system over at least one outer surface of an indicating substrate visually checking for the presence of acid in the gaseous refrigerant sample while minimizing pressure drop of a sample of the gaseous refrigerant extracted from the refrigeration system.

The references relied upon by the examiner are:

Kramer et al. (Kramer)	4,789,638	Dec. 06, 1988
Evers	5,171,536	Dec. 15, 1992
Condit et al. (Condit)	5,363,661	Nov. 15, 1994 (Filed Sept. 3, 1993)

Grounds of Rejection

Claims 1-27 and 29 stand rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate written description in the specification, as originally filed, for the invention now claimed.

Claims 1-27 and 29 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention.

Claims 1, 16, 27 and 30 stand rejected under 35 U.S.C. § 102 (e). As evidence of anticipation, the examiner relies upon Condit.

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Claims 2-15, 17-26, and 29 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner relies upon Condit, Kramer and/or Evers.

We affirm the rejection of claim 30 under 35 U.S.C. § 102 (e), enter a new ground of rejection of claims 1-27 and 29 under the provisions of 37 CFR §1.196(b), and vacate the remaining rejections of claims 1-27 and 29.

Background

The appellants describe the invention at page 11 of the specification as being directed to an accurate, simple, and inexpensive acid test device which can sample the refrigerant vapor from the existing service valves or the recovery tanks of a refrigeration unit to determine the acid level in the refrigerant and thus provide an indication of the condition of the refrigerant and of the refrigeration system.

Discussion

In considering the issues raised by this appeal we have carefully considered the position of the examiner as set forth in the Examiner's Answer of June 4, 1997 (Paper No. 10) and the appellants' position as set forth in the Appeal Brief filed March 27, 1997 (Paper No. 9). In reviewing the record before us, we have determined that a material issue of claim interpretation is present which must be resolved before the merits of the parties' positions relating to claims 1-27 and 29 can be properly considered. Accordingly, we take the following action. In so doing, we emphasize that we are not indicating that the claims are patentable over the prior art relied upon by the examiner. Claim 30 is not subject to the same criticism as to claim interpretation and,

therefore, we have considered the merits of the appeal as to this claim as discussed below.

Opinion

The rejection of claim 30 under 35 U.S.C. § 102(e)

In rejecting claim 30, the examiner has relied upon Condit as teaching a method and apparatus, as represented by Figure 3, for testing refrigerants wherein a sample is removed from a refrigeration system, via a Schrader valve, into a hollow transparent tube which contains an acid indicator. (Answer, page 5). Appellants acknowledge that Condit teaches "a colorimetric pH test device in a hollow transparent member." (Principal Brief, page 14). However, appellants urge that the Condit device is not provided with an open end "adapted to fit on a cooling system Schrader valve." (Principal Brief, page 15). Appellants, further, argue that "[t]he test apparatus of Condit et al. is not a hollow transparent tube open at upstream and downstream ends thereof with a substantially sheet-like substrate held within the member with the upstream end of the member being configured to be held temporarily against the service valve." (Id.) However, the test kit of claim 30 does not require the presence of "a substantially sheet-like substrate" or "a member wherein the upstream end is configured to be held temporarily against the service valve." Further, we do not agree with appellants' assertion that the transparent tube of Condit (Figure 3) is not open at both ends. In describing the use of the apparatus of Figure 3, Condit provides that in order "[t]o test a

sample of refrigerant R134a for contamination by refrigerant R-12 using apparatus 310 and an indicating tube having a bromophenol blue indicating medium, the test operator first breaks the ends off indicator tube 322 and inserts the tube into indicator chamber 331." (Emphasis added). (Column 6, lines 44-51). Thus, both ends of the transparent tube holding the acid detecting medium are open as required by claim 30.

The Condit test device of Figure 3 has been adapted to permit refrigerant to flow through the test assemble or tube through a connector (312) from a valve on the refrigeration system, such as a Schrader valve. The refrigerant flows through the system, including an indicator chamber 331 which has an indicator tube wherein the refrigerant flows across the colorimetric indicating medium 333 contained therein. Condit further explains that "[t]he wall of [the] indicator chamber 331 is made of a transparent material such as plastic. Indicator tube 332 is made of transparent glass or plastic." (col. 6, lines 18-22). Indicating medium 333 is therefore visible through chamber 331 and tube 332. This disclosed embodiment would reasonably appear to correspond to the kit of claim 30 which comprises 1) a hollow transparent member having a opening at upstream and downstream ends with 2) means held only within the member for passing a gaseous refrigerant sample from a refrigerant system over at least one outer surface. The test chamber of Condit, in both cases, is a transparent or glass or plastic tube which has an opening at each end which permits the refrigerant to

flow through and over the indicating medium.

Anticipation requires the disclosure, in a single prior art reference, of each element of the claim under consideration. W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). In our opinion, the test chamber described by Condit is anticipatory of the test kit of claim 30. To the extent that appellants argue that the test apparatus of Condit et al. is a more complicated and expensive structure (Brief, page 15), we note that claim 30 is directed to a test kit "comprising" those elements listed and therefore, as pointed out by the examiner (Answer, page 10), "the instant claim language is open and does not exclude additional structure taught by Condit et al."

When all of the evidence and argument are considered anew, we find, on balance, that the evidence and arguments presented by the appellants, taken as a whole, fail to outweigh the evidence of anticipation provided by the examiner. Therefore, Condit is sufficient to establish a prima facie case of unpatentability as to the subject matter of claim 30 which has not been overcome by appellants arguments and evidence. We, therefore, affirm the rejection of claim 30 under 35 U.S.C. § 102(e).

New Ground of Rejection

Under the provisions of 37 CFR § 1.196(b) we enter the following new ground of

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rejection.

Claims 1-27 and 29 are rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the invention.

Independent claims 1, 13 - 17, 23, 25, 26, and 27, and the claims which depend therefrom, are directed to test kits or acid indicator systems and the use thereof comprising a hollow transparent member with an acid indicator assembly which comprises "a substantially sheet-like substrate."

The legal standard for indefiniteness under 35 U.S.C. § 112, second paragraph, is whether a claim reasonably appraises those of skill in the art of its scope. See Amgen Inc. v. Chugai Pharmaceutical Co., Ltd., 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir. 1991), cert. denied sub nom., Genetics Inst., Inc. v. Amgen, Inc., 112 S.Ct. 169 (1991). In our opinion, the present claims fail to reasonably apprise those skilled in this art of the scope of what is claimed. The terminology "substantially sheet-like substrate" is not explicitly defined in the specification. While the drawings of the Specification (See figures 2, 7, 8, 9, 10, and 11) would reasonably appear to set forth a sheet like structure and one would expect that "pH paper" would similarly be in the form of a sheet, there is nothing of record which would explain what appellants intend by the use of "a substantially sheet-like structure" as compared to a "sheet-like structure". The presence of the term "substantially" in the claim would suggest that it

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has some significance in defining that which appellants regard as their invention. Thus, we would assume that there is a difference in scope between "a substantially sheet-like structure" as compared to "a sheet-like structure." However, it is not clear from the disclosure of this application, even read in light of the prior art, how one skilled in this art would interpret the claim terminology to arrive at a reasonable understanding of the scope of the present claims. Thus, in our opinion, one skilled in this art attempting to ascertain that which is encompassed by the claims in which this language appears, would be left with no guidance from the specification. Further, there is no evidence presently of record which would reasonably indicate that the cited terminology has an art recognized meaning.

It is well established that "definiteness of the language employed must be analyzed, not in a vacuum, but always in light of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art." In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). We note that the purpose of the second paragraph of Section 112 is basically to insure, with a reasonable degree of particularity, an adequate notification of the metes and bounds of what is being claimed. See In re Hammack, 427 F.2d 1378, 1382, 166 USPO 204, 208 (CCPA 1970). When claims 1-27 and 29 are viewed in light of this authority, it does not reasonably appear that one skilled in the art would

be capable of determining the metes and bounds of these claims even when read in light of the specification. Therefore, we reject claims 1-27 and 29 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which the appellants regard as their invention.

The examiner's rejection under 35 U.S.C. § 112, second paragraph

The examiner's rejection of claims 1-27 and 29 under 35 U.S.C. § 112, second paragraph focuses on whether the terminology "sheet-like" is indefinite. (Answer, pages 4-5). However, the examiner fails to explain why one skilled in this art reading the claims in light of the specification, including the drawings, would be unable to ascertain the scope of the claimed subject matter as it relates to the use of the terminology "sheet-like". The examiner's comments at the top of page 5 of the Answer, would appear to reflect a concern as to whether the invention is enabled throughout the scope of subject matter encompassed by the claim which includes the terminology "sheet-like" rather than whether one skilled in this art could determine whether a particular test kit was encompassed by the present claims. However, this is an issue properly raised under the enablement provisions of 35 U.S.C. § 112, first paragraph, and is therefore not before us. In view of the new ground of rejection, we vacate this rejection.

The rejection under 35 U.S.C. § 112, first paragraph

The examiner has rejected claims 1-27 and 29 under 35 U.S.C. § 112, first

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paragraph as lacking an adequate written description in the application as filed for the presently claimed invention as it reflects the language of "a substantially sheet-like substrate." The purpose of the written description requirement of 35 U.S.C. § 112, first paragraph, is to convey with reasonable clarity to those skilled in the art, that, as of the filing date sought, appellants were in possession of the invention now claimed. Vas-Cath Inc. v. Makurar, 935 F.2d 1555, 1564, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). For the reasons set forth in the new ground of rejection, it is our opinion that it has not been determined just what is encompassed by the claims and, therefore, it would appear impossible to ascertain whether the disclosure, as filed, reasonably describes the invention, presently claimed, in a manner which would establish that appellants were in possession of the invention when the application was filed.

Therefore, we vacate the rejection of claims 1-27 and 29 under 35 U.S.C. § 112, first paragraph. This does not preclude the examiner from reconsidering this issue once a claim interpretation has been made. However, we would remind the examiner that for the purposes of the written description requirement of 35 U.S.C. § 112, first paragraph, the invention is whatever is now claimed. The description of the invention is provided using descriptive means such as words, structures, figures, diagrams, formulas, etc. The exact terms need not be used in haec verba. Lockwood v. American Airlines Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966, (Fed. Cir. 1997);

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citing: Eiselstein v. Frank, 52 F.3d 1035, 1038, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995). Thus, as we have stated above, all that is necessary to satisfy the description requirement of 35 U.S.C. § 112, first paragraph, is a written description of the presently claimed invention which would convey to those skilled in the art, that, as of the filing date the applicants were in possession of the invention. Vas-Cath Inc. v. Makurar, supra.

The rejections under 35 U.S.C. § 102(e)/103

For reasons stated supra in our new ground of rejection under 37 CFR § 1.196(b), we are of the opinion that claims 1-27 and 29, fail to satisfy the requirements of 35 U.S.C. § 112, second paragraph. Since the metes and bounds of these claims are unclear, we do not reach the rejections under 35 U.S.C. § 102(e) or 35 U.S.C. § 103 as it relates to these claims. In making a patentability determination, “[a]nalysis begins with a key legal question -- what is the invention claimed?” since “[c]laim interpretation . . . will normally control the remainder of the decisional process,” Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68, 1 USPQ2d 1593, 1597 (Fed. Cir.), cert. denied, 481 U.S. 1052 (1987). Where as here, a reasonable interpretation of the claim can not be made, it follows that it is impossible to compare the claimed invention with the prior art. See Graham v. John Deere Co., 383 U.S. 1,17, 148 USPQ 459, 467 (1966)(“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue

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are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined."). In order to compare the claimed subject matter with the relevant prior art we would first have to speculate or make assumptions as to what is intended by the claim. However, since a rejection under 35 U.S.C. § 102 or 35 U.S.C. § 103 can not be based on speculations and assumptions, (See In re Steele, 305 F.2d 859, 862-63, 134 USPQ 292, 295-96 (CCPA 1962) and In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)), we vacate the prior art rejection of claims 1-27 and 29. We urge the appellants and examiner to work together to determine what the appropriate interpretation of the claim should be. When the proper interpretation of the claims has been made, it will then be appropriate to compare the claimed subject matter with the relevant prior art.

Should further prosecution occur, we would note that the examiner's response to appellants' arguments that the Office has failed to consider the claim language "a substantially sheet like substrate" (Answer, page 9) because "[i]t is not possible for the Office to give consideration to this limitation since it is not supported by the original disclosure and is new matter" is improper. We would urge the examiner to compare the facts in this case with those considered in the decision in Ex parte Pearson, 230 USPQ 711 (Bd. Pat. App. Int. 1985) wherein the rejection of appealed claims under 35 U.S.C.

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§ 112, first paragraph, as lacking support in the specification for terminology present in the claims was affirmed, but the rejection of the claims under 35 U.S.C. § 103 was reversed, holding that "[e]ven though the above quoted expressions are held by us to introduce new matter into the claims, nevertheless, they cannot be ignored, but rather, must be considered and given weight when evaluating the claims so limited with regard to obviousness over art." Citing: In re Miller, 441 F.2d 689, 694 , 169 USPQ 597, 600 (CCPA 1971)("All words in a claim must be considered in judging the patentability of that claim against the prior art"). See also: In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Thus, in reconsidering the patentability of the claims in this application, it is appropriate for the examiner to consider all of the claim terminology in ascertaining what is being claimed prior to attempting to compare the claimed subject matter with the relevant prior art.

SUMMARY

To summarize, we enter a new ground of rejection under the provisions of 37 CFR § 1.196(b) of claims 1-27 and 29, we affirm the rejection of claim 30 under 35 U.S.C. § 102(e) and vacate the rejection of claims 1, 16, and 27 under 35 U.S.C. § 102(e), the rejections of claims 1-27 and 29 under 35 U.S.C. § 112 first paragraph and second paragraph and the prior art rejection of claims 2-15, 17-26, and 29 under 35 U.S.C. § 103.

TIME PERIOD FOR RESPONSE

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This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gas. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)).

37 CFR § 1.196(b) provides, "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the applicants, 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 proceedings (37 CFR § 1.197(c) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART/ VACATED-IN-PART/
37 CFR § 196(b)

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Administrative Patent Judge)	
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