

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SUPPAYAN M. KRISHNAKUMAR, WAYNE N. COLLETTE
and THOMAS E. NAHILL

Appeal No. 95-3789
Application No. 08/047,047¹

HEARD: March 3, 1998

Before COHEN, PATE, and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's rejection of claims 15 through 22, which are all of the claims pending in this application.

We REVERSE and enter a new rejection pursuant to 37 CFR

¹ Application for patent filed April 12, 1993. According to the appellants, the application is a continuation of Application No. 07/831,053, filed February 4, 1992, now abandoned, which was a division of Application No. 07/493,779, filed March 15, 1990, now U.S. Patent No. 5,104,706.

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§ 1.196(b).

BACKGROUND

The appellants' invention relates to a hot filled container and a method of making a hot filled container. Claims 15 and 19 are representative of the subject matter on appeal and a copy of those claims, as they appear in the appendix to the appellants' brief, is attached to this decision.

The prior art references of record relied upon by the examiner as evidence of obviousness under 35 U.S.C. § 103 are:

Agrawal et al. (Agrawal)	4,497,855	Feb. 5, 1985
Collette	4,755,404	July 5, 1988
Miller et al. (Miller)	4,785,950	Nov. 22, 1988
Cook	1,062,671 (Canada)	Sep. 18, 1979

Claims 15, 16, 18, 19, 20 and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Collette in view of Cook and Agrawal.²

² This ground of rejection was set forth as a new ground of rejection in the examiner's answer (Paper No. 22, mailed March 22, 1995).

Claims 17 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Collette in view of Cook, Agrawal and Miller.³

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the § 103 rejections, we make reference to the examiner's answer and the communication regarding the reply brief (Paper No. 24, mailed June 12, 1995) for the examiner's complete reasoning in support of the rejections, and to the appellants' brief (Paper No. 21, filed November 30, 1994) and reply brief (Paper No. 23, filed May 22, 1995) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

³ Id.

Before addressing the examiner's rejections based upon prior art, it is an essential prerequisite that the claimed subject matter be fully understood. Analysis of whether a claim is patentable over the prior art under 35 U.S.C. §§ 102 and 103 begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art. Claim interpretation must begin with the language of the claim itself. See Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 882, 8 USPQ2d 1468, 1472 (Fed. Cir. 1988). Accordingly, we will initially direct our attention to appellants' independent claims 15 and 19 to derive an understanding of the scope and content thereof.

Before turning to the proper construction of independent claims 15 and 19, it is important to review some basic principles of claim construction. First, and most important, the language of the claim defines the scope of the protected invention. Yale Lock Mfg. Co. v. Greenleaf, 117 U.S. 554, 559 (1886) ("The scope of letters patent must be limited to the invention covered by the claim, and while the claim may be illustrated it cannot be enlarged by language used in other parts of the specification."); Autogiro Co. of Am. v. United States, 384 F.2d 391, 396, 155 USPQ

697, 701 (Ct. Cl. 1967) ("Courts can neither broaden nor narrow the claims to give the patentee something different than what he has set forth [in the claim]."). See also Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 419 (1908); Cimiotti Unhairing Co. v. American Fur Ref. Co., 198 U.S. 399, 410 (1905). Accordingly, "resort must be had in the first instance to the words of the claim" and words "will be given their ordinary and accustomed meaning, unless it appears that the inventor used them differently." Envirotech Corp. v. Al George, Inc., 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984). Second, it is equally "fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention." United States v. Adams, 383 U.S. 39, 49, 148 USPQ 479, 482 (1966).

A review of independent claims 15 and 19 reveals that the phrase "on the order of" is used three times in each claim. Specifically, each claim recites that the planar stretch ratio is "on the order of 9 to 12," that the temperature of the hot product is "on the order of 185-190°F," and that the container is internally pressurized at a pressure "on the order of 40 to 45 psig."

The phrase "on the order of" is a term of degree. When a word of degree is used, it is necessary to determine whether the specification provides some standard for measuring that degree. See Seattle Box Company, Inc. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 573-74 (Fed. Cir. 1984).

Admittedly, the fact that some claim language, such as the term of degree mentioned supra, may not be precise, does not automatically render the claim indefinite under the second paragraph of § 112. Seattle Box, supra. Nevertheless, the need to cover what might constitute insignificant variations of an invention does not amount to a license to resort to the unbridled use of such terms without appropriate constraints to guard against the potential use of such terms as the proverbial nose of wax.⁴

In Seattle Box, the court set forth the following requirements for terms of degree:

When a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree. The trial

⁴ See White v. Dunbar, 119 U.S. 47, 51-52 (1886) and Townsend Engineering Co. v. HiTec Co. Ltd., 829 F.2d 1086, 1089-91, 4 USPQ2d 1136, 1139-40 (Fed. Cir. 1987).

court must decide, that is, whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification.

In Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985), the court added:

If the claims, read in light of the specifications [sic], reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the courts can demand no more.

Indeed, the fundamental purpose of a patent claim is to define the scope of protection⁵ and hence what the claim precludes others from doing. All things considered, because a patentee has the right to exclude others from making, using and selling the invention covered by a United States letters patent, the public must be apprised of what the patent covers, so that those who approach the area circumscribed by the claims of a patent may more readily and accurately determine the boundaries of protection in evaluating the possibility of infringement and

⁵ See In re Vamco Machine & Tool, Inc., 752 F.2d 1564, 224 USPQ 617 (Fed. Cir. 1985).

dominance. See In re Hammack, 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970).

In the present case, we have reviewed the appellants' disclosure to help us determine the meaning of the phrase "on the order of" as used in claims 15 and 19. That review has revealed that the appellants' specification utilizes the phrase "on the order of" on pages 2-4 and 7-9.⁶ However, these portions of the disclosure do not provide explicit guidelines defining the phrase "on the order of." Furthermore, there are no guidelines that would be implicit to one skilled in the art defining the phrase "on the order of" that would enable one skilled in the art to ascertain what is meant by the phrase "on the order of." For example, one cannot ascertain if a pressure of 35 psig is "on the order of 40 to 45 psig." Absent such guidelines, we are of the opinion that a skilled person would not be able to determine the metes and bounds of the claimed invention with the precision

⁶ Our review of the record reveals that the appellants (see Paper No. 7, filed August 31, 1992) canceled original claim 4 which claimed "a pressure of 40-45 psig" and added new claim 6 which claimed "a pressure on the order of 40 to 45 psig." In our view, this clearly indicates that pressures outside of 40-45 psig are now encompassed by the phrase "a pressure on the order of 40 to 45 psig."

required by the second paragraph of 35 U.S.C. § 112. See In re Hammack, supra.

Since the appellant's disclosure fails to set forth an adequate definition as to what is meant by the phrase "on the order of" as used in claims 15 and 19, the appellant has failed to particularly point out and distinctly claim the invention as required by the second paragraph of 35 U.S.C. § 112.

Secondly, independent claims 15 and 19 are misdescriptive of the claimed subject matter. The appellants' specification provides the following description of the process of the invention. The invention is practiced by hot filling a container, immediately thereafter adding liquid nitrogen, followed by immediately closing the container "wherein the liquid nitrogen becomes nitrogen gas and internally pressurizes the container." Specification page 1. Thus, the disclosure is to applying the closure and **then** internally pressurizing the container. Both independent claims indicate that the container is pressurized before closure. In claim 15, the preamble states that the container is "filled with hot liquid product and **thereafter internally pressurized and then sealed with a**

closure." Claim 19 positively recites the step of "internally pressurizing . . ." and thereafter recites the step of "applying a closure. . . ." As can readily be seen the steps claimed do not comport with the order of steps in the process given in the appellants' disclosure. Thus, claims 15 and 19 are misdescriptive of the process as disclosed and are therefore indefinite.

Thirdly, both of the independent claims on appeal call for a "hot filled container of the type. . . ." We have often held that language such as this is indefinite for the reason that no definitive statement in the specification explains what type of container "of the type" is intended to cover. Cf. Ex parte Kristensen, 10 USPQ2d 1701 (Bd. Pat. App. & Int. 1989)("for high pressure cleaning units or similar apparatus"). See also Ex parte Steigerwald, 131 USPQ 74 (Bd. App. 1981)("such as"), Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949)("which may be," and "such as, for example"), Ex parte Hall, 83 USPQ 38 (Bd. App. 1948)("material such as rock wool or asbestos,"), Ex parte Lean, 72 USPQ 453 (Bd. Pat. App. 1947)("and like pests" in preamble), Ex parte Caldwell, 1906 C.D. 58 (Comm'r. 1905), and Ex parte

Pappas, 23 USPQ2d 1636 (Bd. Pat. App. & Int. 1992)("or similar structure").

Finally, with respect to claim 15, another issue is raised. In our view, the subject matter encompassed by claim 15 is not clearly set forth. First, it is unclear to us if claim 15 is reciting an "intermediate product of a sealed container filled with a hot liquid product (185-190°F) and internally pressurized (40 to 45 psig)" or a "final product of a sealed container on a shelf somewhere at ambient temperature and unknown internal pressure." Our difficulty stems from the appellants use of the phrase "In a hot filled container" (claim 15, line 1) and their use of product-by process limitations (claim 15, last paragraph). In one sense, these limitations can be construed as limiting the claimed container to the "intermediate product" as set forth above. In another sense, these limitations can be construed as merely describing how the container is assembled. Since the subject matter of claim 15 is susceptible to at least two meanings, it is therefore indefinite. Second, the disclosure does not state, and the claims do not set out, the internal pressure of the filled container after the container has cooled to ambient temperature when the claim is construed to recite the

"final product" as set forth above. Since the claim is stated in product-by-process format, patentability of the subject matter is considered with respect to other hot-filled container products at ambient temperature and pressure. Yet one does not know the pressure of the product of the claim as it exists in final form to establish patentability or determine the metes and bounds of infringement.

NEW GROUND OF REJECTION

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

Independent claims 15 and 19 and claims 16 through 18 and 20 through 22 dependent thereon are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention, for the reasons explained above.

35 U.S.C. § 103 Rejections

Considering now the rejections of claims 15 through 22 under 35 U.S.C. § 103, we have carefully considered the subject matter defined by these claims. However, for reasons stated supra in

our new rejection under the second paragraph of Section 112 entered under the provisions of 37 CFR 1.196(b), no reasonably definite meaning can be ascribed to certain language appearing in the claims. As the court in In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970) stated:

All words in a claim must be considered in judging the patentability of that claim against the prior art. If no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious -- the claim becomes indefinite.

In comparing the claimed subject matter with the applied prior art, it is apparent to us that considerable speculations and assumptions are necessary in order to determine what in fact is being claimed. Since a rejection based on prior art cannot be based on speculations and assumptions, see In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962), we are constrained to reverse, pro forma, the examiner's rejections of claims 15 through 22 under 35 U.S.C. § 103. We hasten to add that this is a procedural reversal rather than one based upon the merits of the section 103 rejections.

CONCLUSION

To summarize, the decision of the examiner to reject claims 15 through 22 under 35 U.S.C. § 103 is reversed and a new rejection of claims 15 through 22 under 35 U.S.C. § 112, second paragraph, has been added pursuant to provisions of 37 CFR § 1.196(b).

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. 53131, 53197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellants, 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 (§ 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. . . .

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

REVERSED; 37 CFR § 1.196(b)

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
WILLIAM F. PATE, III)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JEFFREY V. NASE)	
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APPENDIX

15. In a hot filled container of the type which is filled with a hot liquid product and thereafter internally pressurized and then sealed with a closure, the improvement comprising;

an expanded biaxially-oriented polyester preform container, the container including a neck finish, a body portion and a base portion;

the body portion having a moderately high degree of biaxial orientation with orientation induced crystallinity based on a planar stretch ratio on the order of 9 to 12, said orientation providing both thermal stability and a high resistance to internal pressurization of the container;

the base portion being substantially thicker than the body portion to provide both thermal stability and a high resistance to internal pressurization of the container; and

the container having been filled with a hot product at a temperature on the order of 185-190°F, internally pressurized at a pressure on the order of 40 to 45 psig and then sealed by application of a closure to the neck finish, without the container undergoing any substantial vacuum collapse or creep deformation.

19. In a method of making a hot filled container of the type which is filled with a hot liquid product and thereafter internally pressurized and then sealed with a closure, the improvement comprising;

stretch blow molding a biaxially oriented polyester container from a preform, the container including a neck

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finish, a body portion and a base portion, the body portion being stretched at a planar stretch ratio on the order of 9 to 12 to produce a moderately high degree of biaxial orientation with orientation induced crystallinity, said orientation providing both thermal stability and a high resistance to internal pressurization of the container, the base portion being substantially thicker than the body portion to provide both thermal stability and a high resistance to internal pressurization of the container; filling the container with a hot product at a temperature on the order of 185-190°F;

internally pressurizing the filled container at a pressure on the order of 40 to 45 psig; and

applying a closure to the neck finish, wherein the hot-filled pressurized container does not undergo any substantial vacuum collapse or creep deformation.

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APJ NASE

APJ PATE

APJ COHEN

DECISION: **REVERSED;**
37 CFR § 1.196(b)

Prepared By: Delores A. Lowe

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FINAL TYPED:

Heard: 03 Mar 98

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