

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTOPHER J. PARKS and DEBORA R. MASSOUDA

Appeal No. 1995-4675
Application No. 07/875,452¹

HEARD: March 11, 1999

Before JOHN D. SMITH², GARRIS and KRATZ, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

¹ Application for patent filed April 29, 1992. According to appellants, this application is a continuation-in-part of Application No. 07/721,813 filed June 26, 1991, now abandoned.

² Weiffenbach, Administrative Patent Judge, who participated in the oral hearing for this appeal, is now retired. Therefore, John D. Smith, Administrative Patent Judge, has been added to the panel for participation in the subject decision. Legal support for adding a panel member without requiring reargument can be found in In re Bose Corp., 772 F.2d 866, 869, 227 USPQ 1, 4 (Fed. Cir. 1985).

DECISION ON APPEAL

This is a decision on an appeal from the refusal of the examiner to allow claims 1 through 18 as amended subsequent to the final rejection. These are all of the claims remaining in the application.

The subject matter on appeal relates to a paperboard container comprising a paperboard substrate and an inner sandwich layer on the inner side of the paperboard substrate comprising, in sequence, a first tie layer, an amorphous nylon layer and a second tie layer. Further details of this appealed subject matter are set forth in representative independent claim 1 which reads as follows:

1. A paperboard container having an outer surface and an inner product contact surface comprising:

(a) a paperboard substrate;

(b) a layer of heat-sealable olefin polymer on one side of the paperboard substrate to provide the outer surface of the container;

(c) an inner sandwich layer on the other side of the paperboard substrate comprising, in sequence, a first tie layer, an amorphous nylon layer and a second tie layer; and

(d) a layer of heat sealable olefin polymer on the same side of the paperboard substrate as the inner sandwich layer to provide the inner product contact surface of the container

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whereby the amorphous nylon layer results in enhanced vitamin C retention.

The references relied upon by the examiner in the rejections before us are:

Deak 24, 1989	4,800,129	Jan.
Gibbons et al. (Gibbons) 1, 1990	4,921,733	May
Tanner et al. (Tanner) 1991	4,988,546	Jan. 29,
European patent application 1990 (Löfgren)	0 381 922	Aug. 16,

Claims 1 through 3, 15 and 16 are rejected under 35 U.S.C.

§ 103 as being unpatentable over Tanner in view of Deak; claims 4 and 5 are correspondingly rejected over these references and further in view of Gibbons; and claims 6 through 14, 17 and 18 are correspondingly rejected over all of the aforementioned references in view of the appellants' "admissions."

In addition, claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by Löfgren, and claims 3 through 18 are rejected under 35 U.S.C. § 103 as being unpatentable

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over Löfgren in view of Gibbons or alternatively Gibbons in view of Löfgren.

According to the appellants (e.g., see pages 4 and 5 of the Brief and pages 1 through 3 of the Reply Brief), the following claims stand or fall separately: claim 1; claims 2, 15 and 16; claim 3; claim 6; claim 7; claim 9; claims 10-13; and claims 17 and 18; whereas claims 4, 5, 8 and 14 stand or fall together with the claims from which they depend.

We refer to the Brief and Reply Brief and to the Answer and Supplemental Answer for a complete exposition of the opposing viewpoints expressed by the appellants and the examiner concerning the above noted rejections.

OPINION

For the reasons which follow, we will sustain each of the rejections which are based upon the Tanner reference, but we will not sustain any of the rejections which include the Löfgren reference.

The § 102 as well as the § 103 rejections which include the Löfgren reference are all premised upon the examiner's position that "Appellants' instant claims are broad enough to

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encompass the barrier layer as taught by EPA '922 [i.e., Löfgren] which includes amorphous nylon and EVOH" (Answer, page 6). In response, the appellants argue that "the English language meaning of the [claim 1] phrase 'an amorphous nylon layer' is exactly as stated, namely, a layer of amorphous nylon, not a layer of amorphous nylon mixed with EVOH" (Reply Brief, page 4). Thus, the determinative issue presented by these rejections is whether it is appropriate to interpret the claim phrase "an amorphous nylon layer" as encompassing Löfgren's layer of amorphous nylon mixed with EVOH.

In proceedings before the Patent and Trademark Office, claims in an application are to be given their broadest reasonable interpretation consistent with the specification. In re Sneed, 710 F.2d 1544, 1546, 218 USPQ 385, 388 (Fed. Cir. 1983). It follows that the appellants' claim phrase "an amorphous nylon layer" may be broadly interpreted as encompassing a layer of amorphous nylon mixed with EVOH in accordance with the examiner's position only if such an interpretation is reasonable and consistent with the subject specification. With this in mind, we observe that the appellants' specification including the various embodiments,

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drawing figures and examples consistently disclose amorphous nylon only as the material of construction for the inventive barrier layer under consideration. More significantly, page 5 of the specification expressly discloses "it has been found that such low-strength amorphous nylon can be used as the barrier material in a paperboard substrate without requiring an additional high strength polymer or an additional oxygen barrier layer" (lines 14-17; emphasis added).

These disclosures lead us to conclude that it would not be reasonable and consistent with the subject specification to interpret the claim phrase "an amorphous nylon layer" in the manner urged by the examiner, namely, as encompassing Löfgren's layer of amorphous nylon mixed with EVOH. Indeed, the examiner's proffered claim interpretation would actually be inconsistent with the aforequoted disclosure on page 5 of the appellants' specification. Under these circumstances, it is clear that the examiner's anticipation as well as his

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obviousness³ rejections which include the Löfgren reference are improper.

It follows that we will not sustain the examiner's § 102(b) rejection of claims 1 and 2 as being anticipated by Löfgren nor his § 103 rejections of claims 3 through 18 as being unpatentable over Löfgren in view of Gibbons or alternatively Gibbons in view of Löfgren.

Concerning the § 103 rejection based on Tanner in view of Deak, the examiner proposes that, "[s]ince Tanner ... teaches the use of a polyamide as a barrier layer and amorphous nylon is known to provide good barrier property to oxygen as taught by Deak, it would have been obvious to one skilled in the art to have utilized amorphous nylon as the barrier layer in the structure of Tanner" (Answer, page 4)⁴. In support of their

³ We here clarify that these obviousness rejections propose using Löfgren's layer of amorphous nylon mixed with EVOH and do not propose using amorphous nylon alone as a barrier layer.

⁴ The examiner additionally expresses the alternative position that "Appellants' instant claims are broad enough to include the barrier layer blends of Deak which also include amorphous nylon" (Answer, page 10). For the reasons previously discussed with respect to the Löfgren reference, however, we agree with the appellants' basic viewpoint that
(continued...)

contrary view, the appellants argue that these references would not have provided an artisan with ordinary skill with the requisite suggestion or reasonable expectation of success vis à vis use of amorphous nylon as the barrier layer in Tanner's container structure. We are unpersuaded by this argument.

The construction of the container defined by appealed claim 1 differs from that of Tanner (e.g., see Figure 6) by virtue of the claim requirement for "an amorphous nylon layer." As correctly indicated by the examiner, however, although Tanner does not disclose amorphous nylon specifically, he expressly teaches making his barrier layer (see element 60 in Figure 6) from polyamide polymer (see line 45 in column 4) which is generic to amorphous nylon. Moreover, Deak expressly teaches that amorphous polyamides exhibit "excellent oxygen barrier properties" in containers of the type under consideration (e.g., see lines 11 through 18 in column 1). Contrary to the appellants' argument, these

⁴(...continued)
the claim phrase "an amorphous nylon layer" cannot be properly interpreted as encompassing blends of amorphous nylon and semicrystalline polyamides of the type taught by Deak.

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reference teachings from our perspective would have suggested making Tanner's polyamide barrier layer from amorphous nylon specifically based upon a reasonable expectation of obtaining "excellent" barrier properties in accordance with the disclosure of Deak.

In light of the foregoing, it is our determination that the Tanner and Deak references establish a prima facie case of obviousness with respect to the subject matter defined by the independent claim on appeal.

We reach a corresponding determination for the separately argued dependent claims on appeal. This is because we perceive the features recited in these claims as being at least generically known in the prior art as result effective. For example, the particular layer construction defined by dependent claim 2 would have been obvious to an artisan with ordinary skill in light of the applied prior art (e.g., again see Figure 6 of Tanner). Similarly, the material of construction features such as the low density polyethylene required by dependent claim 3 is expressly taught or at least would have been suggested by Tanner (e.g., see element 56 in Figure 6). Finally, it is our view that the dependent claim

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parameters such as the "lbs/ream" values defined by, for example, dependent claim 6 are recognized in the art as result effective variables; and it is well established that the determination of workable or even optimum values for such parameters would have been obvious to those with ordinary skill in the art. In re Boesch, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980); In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

For the above stated reasons, we conclude that a prima facie case of obviousness exists with respect to each of the examiner's § 103 rejections of the appealed claims which are based upon the Tanner reference.

As evidence of nonobviousness, the appellants rely upon the 1993 Parks Declaration (Table 1 of which is derived from Table 3 of the specification; see page 17 of the Brief) and the 1994 Parks Declaration. The appellants consider these declarations to show that the tested inventive container structure having an amorphous nylon layer exhibited unexpected results via a surprisingly favorable comparison with a typical prior art container structure having an EVOH layer. According to the examiner, these declarations fail to show unexpected

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results due to a lack of consistency and clarity with regard to the comparative testing referred to therein.

We do not agree with the examiner's criticisms of the aforementioned declarations. While certain values of the comparative data set forth in these declarations may appear to be inconsistent on a superficial level, the 1994 Parks Declaration provides a reasonable explanation of such apparent inconsistencies. Furthermore, particularly in light of this explanation, we consider these declarations to establish with an acceptable degree of clarity a showing of unexpected results as urged by the appellants.

Nevertheless, it is clear to us that the appellants' declaration evidence is considerably more narrow in scope than the claims on appeal. More specifically, each of the comparative tests referred to in these declarations involves only a single type of amorphous nylon, namely, "Selar PA" whereas none of the appealed claims are limited to any particular type of amorphous nylon.

This difference in scope is pivotally significant since it is well established that rebuttal evidence which is considerably more narrow in scope than claimed subject matter,

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as here, is not sufficient to rebut a prima facie case of obviousness. In re Dill, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979). Indeed, for all we know based upon the record before us including the proffered declaration evidence, the unexpected results shown in the Parks Declarations are not exhibited by amorphous nylons generally but only by the specifically tested amorphous nylon "Selar PA." Thus, the fatal deficiency of the appellants' declaration evidence of nonobviousness is that it fails to show unexpected results for amorphous nylons as a class in accordance with the here claimed invention. In re Hostettler, 429 F.2d 464, 466, 166 USPQ 558, 560 (CCPA 1970).

The circumstances recounted above lead us to the ultimate determination that all the evidence of record, on balance, weighs most heavily in favor of an obviousness conclusion. We shall sustain, therefore, the § 103 rejections of claims 1 through 3, 15 and 16 as being unpatentable over Tanner in view of Deak, of claims 4 and 5 as being unpatentable over these references and further in view of Gibbons and of claims 6 through 14, 17 and 18 as being unpatentable over Tanner, Deak and Gibbons and further in view of the appellants'

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"admissions." However, because our rationale for sustaining these rejections differs from the rationale advanced by the examiner on this appeal, we hereby denominate these sustained rejections as new grounds of rejection pursuant to 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. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark 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. . . .

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

The decision of the examiner is affirmed.

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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).

AFFIRMED, 1.196(b)

JOHN D. SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
BRADLEY R. GARRIS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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PETER F. KRATZ)	
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