

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DANIEL J. VOLK

Appeal 2008-1331
Application 10/446,599
Technology Center 3600

Decided: June 24, 2008

Before JENNIFER D. BAHR, LINDA E. HORNER, and STEVEN D.A.
MCCARTHY, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Daniel J. Volk (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1, 2, 6, 7, 9-13, 16-18, and 20. Claims 3-5, 8, 14-15, and 19 have been canceled. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

THE INVENTION

The Appellant's invention is directed towards a unitary skewer 10 including a base member 12 having a top surface 14 and a bottom surface 16, a stem member 20, a penetrating tip 30, and at least one stabilizing member 50 positioned along stem member 20 (Spec. 5, l. 27 through Spec. 6, l. 4 and figs. 1 and 3). The top surface 14 of base member 12 includes a curvature that forms an indentation 60 for providing the user of the skewer 10 with a convenient pad to press down so as to facilitate the penetration of the skewer 10 into food items 100, 101 (Spec. 6, ll. 17-29 and figs. 2A and 3). The penetrating tip 30 is a generally arrow-shaped structure (Spec. 7, ll. 28-29 and fig. 4). The stabilizing member 50 is a generally triangularly shaped member 52 that extends beyond the width of the stem member 20 (Spec. 8, ll. 15-17 and fig. 6). The cross-section of stem member 20 is shaped similar to a "+" (plus) sign (Spec. 9, ll. 29-30 and fig. 8).

Claims 1 and 18 are illustrative of the claimed invention and read as follows:

1. A skewer for anchoring at least two food items together comprising:
 - a) a base member having a top surface and a bottom surface;
 - b) a stem member comprising a planar member lying in a plane and two perpendicular ridges together forming a plus sign (+) cross section along the stem member, wherein a proximal end of the stem member is attached to the bottom surface of the base member and the stem member extends from the bottom surface of the base member; and
 - c) a penetrating tip extending from a distal end of the stem member, whereby the perpendicular ridges

help anchor the skewer into the at least two food items and provide resistance to the removal of the skewer from and the rotation of the skewer within the at least two food items;

wherein the plus sign (+) cross section extends along at least a portion of the length of the stem member from the base member to a terminating point proximal to the means for penetrating.

18. A skewer for anchoring at least two foods items consisting essentially of:
- a) a base member having a top concave surface in one direction and a bottom surface;
 - b) a stem member extending from the bottom surface of the base and having a plus sign (+) cross section;
 - c) a penetrating tip shaped as an arrowhead extends from the distal end of the stem member;
 - d) a stabilizing member shaped triangularly positioned along the stem member between the base member and the penetrating tip and having a flat, generally triangularly configured body protrudes beyond the width of the stem member; and
 - e) two perpendicular ridges extending along the stem member from the base member to the penetrating tip;

wherein the plus sign (+) cross section extends along at least a portion of the length of the stem

member from the base member to a terminating point proximal to the penetrating tip,

whereby the at least one stabilizing member helps anchor the skewer into the at least two food items and provides resistance to the removal of the skewer from and the rotation of the skewer within the at least two food items.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Shipe	US 623,571	Apr. 25, 1899
Glantzlin	US 2,622,268	Dec. 23, 1952
Smuts	US 3,552,017	Jan. 5, 1971
Brookhouse	Des. 367,590	Mar. 5, 1996

Merriam Webster's Collegiate Dictionary 886 (Tenth Ed. 1997) (hereafter "Dictionary").

The following rejections are before us for review:

Claims 1, 2, 9, and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shipe.¹

Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Shipe in view of Smuts.

Claim 17 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Shipe.²

¹ Although the Appellant includes claim 4 as subject to this rejection (App. Br. 5), we note that claim 4 has been canceled (App. Br. 16) and is not involved in the instant appeal.

Claims 11, 12, 13, 16, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Shipe, Smuts, Glantzlin, and Brookhouse.

The Examiner provides reasoning in support of the rejections in the Answer (mailed April 18, 2007). The Appellant presents opposing arguments in the Appeal Brief (filed February 2, 2007) and the Reply Brief (filed June 18, 2007).

OPINION

Claims 1, 2, 9, and 10

Shipe discloses a skewer having a main body (stem member), a head portion (base member), a knife-edge point A' (penetrating tip), and longitudinal ribs A² having knife-edges b (two perpendicular ridges extending along the stem member) (Page 1, ll. 28-31 and 38-39). The main body of the skewer has a four-winged cross-section defined by longitudinal ribs A² and semi-oval portions A (Page 1, ll. 41-49 and figs. 1 and 1^e).

The Appellant's argument as to why Shipe does not anticipate claim 1 is that the skewer of Shipe "does not have 'a planar member' . . . with two perpendicular ridges, which creates the 'plus (+) sign' configuration" (App. Br. 8) (underlining in original).

An issue presented in the appeal of the rejection of claims 1, 2, 9, and 10 is whether the skewer of Shipe includes a stem member having a "planar member lying in a plane." According to the Examiner, the definition of the

² Although the Appellant does not specifically address the grounds of rejection of claims 6, 7, and 17, it is apparent that the Appellant intends to contest the rejections of claims 6, 7, and 17 as part of the instant appeal (App. Br. 22 and Reply Br. 3), presumably relying on the same argument advanced against the rejection of claim 1.

term “planar” as provided by the Dictionary is “1: of, relating to, or lying in a plane 2: two dimensional in quality” (Ans. 7). The Examiner concludes that the skewer of Shipe satisfies the limitation of a “planar member lying in a plane” because “all objects lie in some plane” (Page 3 of the Office Action mailed on February 28, 2006). The Appellant argues that the interpretation by the Examiner of the limitation “planar member lying in a plane” is overly broad and unreasonable under the circumstances (App. Br. 6 and Reply Br. 2). Specifically, the Appellant argues that the ordinary meaning of the term “planar” is “generally flat” and that the Examiner’s interpretation “has unduly expanded the meaning of the term ‘planar member’ to include ‘all objects’” (App. Br. 6-7). We think the Appellant has the better argument here.

Claims are construed with an eye toward giving effect to all terms in the claim. *Bicon Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006). *See Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007) (denouncing claim constructions which render phrases in claims superfluous). The Examiner’s interpretation of “planar member lying in a plane” as covering every object, or member, in effect renders meaningless, or superfluous, the phrases “planar” and “lying in a plane.” We thus conclude that the Examiner’s claim construction is flawed.

When construing claim terminology in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). We typically think of surfaces, rather than members, as being planar,

or lying in a plane, and members as having planar surfaces, rather than as themselves being planar. For example, in elementary geometry the ordinary and customary meaning of a “plane” is “a level or flat surface” (*The New Merriam Webster Dictionary* 555 (1989 Edition)). While we might be tempted to interpret a “planar member” as a member having at least one level or flat surface, claim 1 further requires that such “planar member” lie in a plane. The only way to give effect to both phrases “planar” and “lying in a plane” is to interpret the language “planar member lying in a plane” as requiring a member that has a flat profile characterized by flat or planar opposed surfaces, in essence simulating a plane, but with a third dimension of some thickness. This is consistent with the Appellant’s description of “the cross section of stem member 20 as shaped similar to a ‘+’ sign resembling the intersection of two perpendicular planes” (Spec. 9, ll. 29-30), as depicted in Figure 8.

In Figure 1^e of Shipe the cross-section of the skewer is defined by semi-oval portions A and longitudinal ribs A². According to the Examiner the semi-oval portions A of the skewer of Shipe corresponds to the limitation of a “planar member lying in a plane,” required by claim 1 (Fig. 1 of Shipe as modified by the Examiner, Ans. 9). However, the semi-oval portions A of Shipe cannot constitute a “planar surface lying in a plane” because it does not have a flat profile characterized by flat or planar opposed surfaces. As such, we agree with the Appellant that the skewer of Shipe does not disclose the limitation of a “planar member lying in a plane,” as required by claim 1. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*,

814 F.2d 628, 631 (Fed. Cir. 1987). Having determined that Shipe does not disclose all the limitations of claim 1, we thus conclude that Shipe does not anticipate claim 1. Therefore, the rejection of claim 1 and claims 2, 9, and 10 depending from claim 1 is reversed.

Claims 6, 7, and 17

Regarding claims 6 and 7, the Examiner does not rely on Smuts for any teaching that would make up for the deficiency of Shipe as discussed above. Hence, the rejection of claims 6 and 7 under 35 U.S.C. § 103(a) as unpatentable over Shipe in view of Smuts is reversed.

With respect to claim 17, which depends from claim 1, even accepting the Examiner's position that it would have been obvious to make Shipe's skewer of plastic (Ans. 7), that would not make up for the deficiency of Shipe noted above. For the reasons set forth above with respect to claim 1, we reverse the rejection of claim 17 under 35 U.S.C. § 103(a) as unpatentable over Shipe.

Claims 11, 12, 13, and 16

Independent claim 11 includes the limitation of a "stem member... including a planar member lying in a plane and two ridges extending perpendicularly along the planar member." As discussed above with respect to independent claim 1, we found that Shipe does not disclose the limitation of a "planar member lying in a plane." Moreover, the Examiner does not rely on Smuts, Glantzlin, and Brookhouse for any teaching that would make up for this deficiency of Shipe. It is elementary that to support an obviousness rejection all words in a claim must be considered in judging the

patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). Therefore, the rejection of claim 11, and claims 12, 13, and 16 depending from claim 11, under 35 U.S.C. § 103(a) as unpatentable over Shipe in view of Smuts, Glantzlin, and Brookhouse cannot be sustained.

Claims 18 and 20

The Appellant argues the rejection under 35 U.S.C. § 103(a) of claims 18 and 20 together as a group. Therefore, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we have selected claim 18 as the representative claim to decide the appeal, with claim 20 standing or falling with claim 18.

The issue presented in the instant appeal of the rejection of claim 18 under 35 U.S.C. § 103(a) as unpatentable over Shipe, Smuts, Glantzlin, and Brookhouse is whether the Appellant has demonstrated that the Examiner erred in determining that the subject matter of claim 18 is unpatentable over Shipe, Smuts, Glantzlin, and Brookhouse.

Smuts is directed towards a rotating spaghetti fork having a curved actuating cap 7 (col. 2, ll. 37 and 69-72 and fig. 2). To use the spaghetti fork, the user places the thumb or forefinger on top of cap 7 to press cap 7 and plunger 6 (col. 2, l. 69 to col. 3, l. 2). Glantzlin discloses a skewer having projections 8 along edges 2 and 3 that provide for increased frictional grip between the skewer and the food article inserted into the skewer (col. 1, ll. 17-19, col. 2, ll. 6-10; col. 3, ll. 42-45; and fig. 14). Brookhouse discloses a corncob holder (skewer) having a triangular projection along each of its edges (fig. 2).

The Examiner asserts that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Shipe by Smuts to have the top surface of a base being curved in order to be pressed more easily by a thumb or finger” and to have further modified Shipe “by the teaching of Glantzlin to have projections such as taught by Brookhouse for stylistic considerations and to increase gripping or holding power” (Ans. 6).

The Appellant argues that the combination of Shipe, Glantzlin, Smuts, and Brookhouse does not disclose a skewer “having a plus sign cross-section that extends along the stem member from the base to the penetrating tip” (App. Br. 13). As noted above, the main body of Shipe’s skewer has a four-winged cross-section defined by longitudinal ribs A² and semi-oval portions A (Page 1, ll. 41-49 and figs. 1 and 1^e). In the Specification, the Appellant describes the cross section of the stem member 20 as being “shaped similar to a ‘+’ sign resembling the intersection of two perpendicular planes” (underlining added) (Spec. 9, ll. 29-30 and fig. 8). Like the Appellant’s plus (+) sign configuration, the four-winged cross-section of the skewer of Shipe is symmetrical about two perpendicular axes. Therefore, we find that a person of ordinary skill in the art would have recognized that the four-winged cross-section of the skewer of Shipe is a cross section having a plus (+) sign configuration, within the context of the Appellant’s disclosed invention.

The Appellant further appears to argue that the Examiner has failed to identify any motivation, suggestion or teaching of the desirability to combine Shipe, Glantzlin, Smuts, and Brookhouse to arrive at the Appellant’s invention (App. Br. 13). While there must be some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 127 S.Ct. 1727, 1741 (2007).

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id. at 1740. We must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

Id. In this case, Shipe discloses a skewer. Brookhouse teaches a skewer (corncob holder) having a triangular projection along each of its edges. Glantzlin teaches that projections along the edges of a skewer provide for increased frictional grip between the skewer and the food article inserted into the skewer, thus providing for improved handleability of the food article. Smuts, while not directed specifically towards a skewer, is drawn to a food handling device (spaghetti fork) that uses a top cap with a curved surface for permitting the seating of the user's finger or thumb thereon to facilitate pressing of the cap to thereby secure the food. One of ordinary skill in the art would have appreciated that a curved contour such as that of Smuts on the base of the skewer of Shipe would likewise facilitate pressing

of the skewer into the food article. Furthermore, a person of ordinary skill in the art would have been prompted to modify the skewer of Shipe with the projections of Brookhouse because Glantzlin specifically teaches that such projections provide for increased frictional grip between the skewer and the food article inserted into the skewer. Moreover, modifying the skewer of Shipe to provide the curved base of Smuts and the projections of Brookhouse according to Glantzlin would not have been uniquely challenging to a person of ordinary skill in the art because it is no more than “the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *KSR*, 127 S.Ct. at 1740. Therefore, the modification appears to be the product not of innovation but of ordinary skill and common sense. Furthermore, when the improvement is technology-independent and the combination of references results in a product or process that is more desirable, an implicit motivation to combine exists even absent any hint of suggestion in the references themselves. “In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him *capable* of combining the prior art references.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006). A person of ordinary skill in the art would readily appreciate that the benefits gained by providing the curved base of Smuts is not unique to a spaghetti fork and that such benefits could also be achieved in the skewer of Shipe. Furthermore, Glantzlin specifically teaches that projections such as those of Brookhouse provide a benefit such as increased frictional grip between the skewer and the food article inserted into the skewer. Moreover, the Appellant does not provide any evidence to

show that the modification of Shipe to provide a curved base and a plurality of projections would have been beyond the technical grasp of a person of ordinary skill in the art.

For the foregoing reasons, the Appellant's arguments do not persuade us the Examiner has erred in rejecting claim 18 under 35 U.S.C. § 103(a) as unpatentable over Shipe, Smuts, Glantzlin, and Brookhouse. The rejection of claim 18, and claim 20 standing or falling with claim 18, is sustained.

DECISION

The decision of the Examiner to reject claims 1, 2, 9, and 10 under 35 U.S.C. § 102(b) as anticipated by Shipe is reversed.

The decision of the Examiner to reject claims 6 and 7 under 35 U.S.C. § 103(a) as unpatentable over Shipe in view of Glantzlin is reversed.

The decision of the Examiner to reject claim 17 under 35 U.S.C. § 103(a) as unpatentable over Shipe is reversed.

The Examiner's rejection of claims 11, 12, 13, 16, 18, and 20 under 35 U.S.C. § 103(a) as unpatentable over Shipe in view of Smuts and further in view of Glantzlin and Brookhouse is reversed as to claims 11, 12, 13, and 16 and affirmed as to claims 18 and 20.

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) (2007).

AFFIRMED-IN-PART

Appeal 2008-1331
Application 10/446,599

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