

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte SCOTT JACOBS

Appeal 2007-2027
Application 10/210,269
Technology Center 3700

Decided: July 13, 2007

Before DONALD E. ADAMS, ERIC GRIMES, and RICHARD M.
LEBOVITZ, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a protective athletic cup. The Examiner has rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

BACKGROUND

“Current athletic cups are sometimes formed from hard thermoplastic materials of sufficient strength to resist the impact of, for example, a baseball traveling at high speed” (Specification 1). While conventional

athletic cups are designed to prevent injury to the area receiving the direct impact, “[t]hey are not satisfactory in preventing collateral injury, nor are they totally comfortable to wear due to the rigid construction” (*id.*).

The Specification discloses “an athletic cup made from a resilient material having a quantity of gas pockets dispersed therein and a rigid plastic cage supporting the resilient material to prevent collapse thereof” (*id.* at 4). The resilient material is made by heating a mixture of a resilient thermoplastic material, such as ethylene vinyl acetate, and a blowing agent, such as p, p'-oxybis (benzenesulfonyl hydrazide) (*id.*). “The rigid plastic cage is preferably formed from hard polymers and most preferably from acrylonitrile-butadiene-styrene copolymers, hereinafter (ABS) having a high degree of hardness” (*id.*).

DISCUSSION

1. CLAIMS

Claims 1, 3-11, and 13-20 are pending and on appeal. Claim 1 is representative and reads as follows:

Claim 1. An athletic cup having a shape generally designed to have a narrow portion fit between the legs of a user while an upper or wider portion extends up over the area of the body being protected, comprising:

a primary portion formed from a resilient thermoplastic composition having a quantity of gas pockets dispersed therein, said primary portion forming an inner segment for contact with a user; and

a hard portion bonded to said primary portion shaped as an open cage and forming an outer segment having an outer face and a high degree of rigidity to prevent collapse on impact from an object, said hard portion including a plurality of open interstices across said face, whereby said primary portion

extends into said interstices in said hard portion across said face;

said primary portion also including a peripheral lip having a degree of flexibility for contact with the user.

Thus, claim 1 is directed to a conventionally shaped athletic cup having a resilient portion and a hard open cage-shaped portion bonded to the resilient portion. The hard portion has a plurality of open interstices across its face, and the resilient portion extends into the interstices.

2. PRIOR ART

The Examiner relies on the following references:

Jacobs	US 5,732,715	Mar. 31, 1998
McKay	US 5,983,407	Nov. 16, 1999
Lukens	US 2003/0163076 A1	Aug. 28, 2003

3. OBVIOUSNESS -- CLAIMS 1, 3-6, 9-11, 13-16, 19, AND 20

Claims 1, 3-6, 9-11, 13-16, 19, and 20 stand rejected under 35 U.S.C. § 103 as obvious in view of Lukens and Jacobs (Answer 3-4).¹ The Examiner cites Lukens as disclosing an athletic cup “compris[ing] a primary cushion portion (12) formed from a resilient thermoplastic elastomer composition, said primary portion forming an inner segment for contact with a user” (*id.* at 3).

The Examiner states that “[a] hard crush-resistant portion (14) is bonded to the primary portion and is shaped as an open ‘cage’ . . . a cage being ‘a box or enclosure *having some openwork for confining or carrying* ’” (*id.*). The Examiner states that the hard outer portion of Lukens’ cup has “a

¹ Examiner’s Answer of May 18, 2006.

plurality of open interstices (56) across the face, whereby said primary portion 12 extends into said interstices in said hard portion across said face” (*id.* at 4). The Examiner concedes that “Lukens does not specify that the primary portion of the athletic cup ha[s] gas pockets formed in the thermoplastic” (*id.*).

To meet this deficiency, the Examiner cites Jacobs as disclosing “a bodily protective device made of a ‘resilient composition having gas pockets therein to increase attenuation and dampening of shocks or blows applied thereto’” (*id.*, quoting Jacobs, col. 3, ll. 32-36). The Examiner concludes that one of ordinary skill would have considered it obvious to provide Lukens’ cup with a “thermoplastic primary portion . . . [with] gas pockets therein, as taught by Jacobs et al., to increase attenuation and dampening of shocks and blows applied thereto” (*id.*). We agree with the Examiner’s *prima facie* case of obviousness.

Appellant argues that “[t]he holes of Lukens do not create a cage-like structure because the holes are for the purpose of ventilation and do not describe an open cage as set forth in claim 1” (Br. 5).² Appellant concludes that “[t]here is nothing in this reference or any other that would lead one skilled in the art to enlarge the ventilation holes or logo contrary to the reference's teachings to make a cage-like structure” (*id.* at 5). Appellant urges that the prior art does not suggest modifying Lukens’ cup “to have the interstices over the entire face of the outer portion, particularly since the Lukens outer portion is stated in paragraph 0018 as being fully integrated to form a ‘single cup structure’” (*id.*).

² Appeal Brief filed September 26, 2005.

We do not find Appellant's arguments persuasive. We note that Appellant's drawings depict athletic cups in which the outer hard cage portion appears to expose more of the underlying resilient portion than the apertures 56 of Lukens's cup. See Specification, Figures 1 to 3; see also Lukens, Figure 1. Appellant appears to read the language in claim 1 "shaped as an open cage" to encompass only barred enclosures similar to those depicted in Figures 1 to 3, rather than the apertured structure of Lukens' cup.

However, "while it is true that claims are to be interpreted *in light of* the specification . . . , it does not follow that limitations from the specification may be read into the claims. . . . It is the *claims* that measure the invention." *Sjolund v. Musland*, 847 F.2d 1573, 1582, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988). Here, Appellant's claim 1 does not require the cage to expose any particular percentage of the underlying resilient portion of the cup, or limit the interstices to any particular size, or recite any particular configuration for the hard portion of the cup. Claim 1 therefore does not contain any limitation distinguishing the claimed cup's outer portion from the outer portion of Lukens' cup.

Moreover, it is well settled that "claims in an application are to be given their broadest reasonable interpretation consistent with the specification and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983) (citation omitted). As pointed out by the Examiner, one dictionary definition for the term "cage" is "a box or enclosure having some openwork for confining or carrying" (Answer 6).

Lukens discloses an athletic cup with a “rigid [outer] member ha[ving] a plurality of holes 56 to receive material from the resilient member. The holes allow a portion of the resilient member 12 to be molded up through the rigid member 14” (Lukens [0028]; see also Lukens’ Figure 6, showing rigid outer member and holes 56).

Thus, the rigid outer portion of Lukens’ cup has the apertures, or “openwork,” present in a cage. We therefore agree with the Examiner that the recitation “shaped as an open cage” encompasses the apertured structure of Lukens’ cup, when that language is given its broadest reasonable interpretation. Moreover, because the apertures 56 “receive material from the [underlying] resilient member” (Lukens [0028]), we agree with the Examiner that Lukens’ cup meets the limitation in claim 1 that the “hard portion includ[es] a plurality of open interstices across said face, whereby said primary portion extends into said interstices.”

Appellant argues that the Examiner’s references are from non-analogous arts because Jacobs’ device is a mouth guard and Lukens’ device is an athletic cup (Br. 6). Appellant argues that mouth guards and athletic cups function differently, because “[i]n a cup, the outer portion takes the force of the impact and the inner portion prevents the impact from being transferred to the body. In a mouth guard, there is only one portion to take the force of the impact” (*id.* at 6-7). Appellant concludes that therefore “one skilled in the art would not look at a two piece athletic cup and modify it with the material from a single piece mouthguard, particularly since the mouthguard is designed to absorb impact and only the outer portion of a cup absorbs impact” (*id.* at 7).

We do not find Appellant's argument persuasive. As stated in *In re Clay*, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992), the two criteria for evaluating whether a reference is sufficiently analogous to the invention are "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved."

Jacobs states that the disclosed mouth piece was designed "to provide a resilient composition having gas pockets therein to increase attenuation and dampening of shocks or blows applied thereto thus increasing protection" (Jacobs, col. 3, ll. 32-36). Thus, Jacobs' disclosure is directly pertinent to the same problem addressed by athletic cups -- protecting areas of the human body susceptible to damage from direct shocks or blows.

Therefore, Jacobs' resilient material addresses the same problem addressed by athletic cups. We therefore agree with the Examiner that Jacobs is "reasonably pertinent to the particular problem with which the inventor is involved." *In re Clay*, 966 F.2d at 659, 23 USPQ2d at 1060. Moreover, because Jacobs discloses that the gas pocket-containing resilient material dampens shocks or blows applied to it, one of ordinary skill would have considered Jacobs' gas pocket-containing material to be desirable as the resilient material in Lukens' athletic cup.

We affirm the Examiner's rejection of claim 1 as obvious over Lukens and Jacobs. Because they were not argued separately, claims 3-6, 9-11, 13-16, 19, and 20 fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

4. OBVIOUSNESS -- CLAIMS 7, 8, 17, and 18

Claims 7, 8, 17, and 18 stand rejected under 35 U.S.C. § 103 as obvious in view of Lukens, Jacobs and McKay (Answer 4-5).

The Examiner states that “Lukens in view of Jacobs et al. discloses the previously described athletic cup, having a primary portion of a thermoplastic composition with gas pockets” (*id.* at 4). The Examiner concedes that “Lukens does not specify that the hard portion of the athletic cup be made of ABS” (*id.*).

To meet this deficiency, the Examiner cites McKay as disclosing “a bodily protective device made from ABS to resist forces from impacts, and to distribute these forces over a relatively large area. McKay discloses that the protective device is sufficiently rigid to perform this function” (*id.* at 5). The Examiner concludes that one of ordinary skill would have considered it obvious to provide “the athletic cup disclosed by Lukens in view of Jacobs et al., with a hard portion made of ABS, as taught by McKay, to resist force from impact” (*id.*).

Appellant argues that the issue in this rejection is “whether the third reference, McKay[,] discloses a minimum hardness (Claim 7) for the cage-like outer portion of Lukens as modified by Jacobs” (Br. 7). Appellant argues that “[t]here is no bas[i]s to assume that the material of McKay, even though it is ABS, would have any particular value for hardness” (*id.*).

We are not persuaded by Appellant’s arguments. “When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims

as to the ground of rejection on the basis of the selected claim alone.” 37 C.F.R. § 41.37(c)(1)(vii)

Here, claim 8 is the broadest claim subject to this ground of rejection, and is therefore representative of the rejected claims. Claim 8 reads: “The device of claim 1 wherein said hard portion is ABS.” Because the claims have been argued as a group, the remaining claims will stand or fall with claim 8. 37 C.F.R. § 41.37(c)(1)(vii).

We agree with the Examiner that the teachings of Lukens, Jacobs, and McKay render claim 8 obvious. As discussed above, the Examiner has established that one of ordinary skill would have considered the athletic cup recited in claim 1 obvious over Lukens and Jacobs. Neither Lukens nor Jacobs discloses using ABS as the rigid portion of Lukens’ cup.

However, McKay discloses “protective guards worn over the coccyx” for use in, for example, ice and roller skating (McKay, col. 1, ll. 15-21). McKay’s device is composed of a “rigid member [that] provides the structural base of the protective pad,” covered on the front and back by resilient flexible members (*id.* at col. 2, ll. 13-16). McKay discloses that this structural base of the device “is formed from a substantially rigid material, such as acrylonitrile butadiene styrene (ABS), which . . . has sufficient rigidity to maintain configuration of hook 14 and protective panel 16 under ordinary use, *to resist forces from impacts, and to distribute these forces over a relatively large area*” (*id.* at col. 3, ll. 25-30, emphasis added).

We agree with the Examiner that one of ordinary skill viewing Lukens and Jacobs in light of McKay would have considered claim 8 obvious. Specifically, one of ordinary skill would have considered it obvious to

construct the rigid portion of Lukens' cup from ABS, because, as disclosed by McKay, ABS is a rigid material that resists forces from impacts to the body, and distributes those forces over a relative large area.

Appellant argues that McKay uses the ABS as the inner material of the device, covering both the front and back of the ABS with foam (*id.* at 8). Appellant argues that the rejection therefore reverses McKay's teachings by "taking the inner material that is hard and substituting it for the outer material of Lukens, rather than substituting inner material for inner material" (*id.*). Thus, Appellant argues, "there is no suggestion in any of the references that one would modify a portion of Lukens with the outer hard portion claimed herein, because this is contrary to the teachings of the references" (*id.*).

We are not persuaded by this argument. As recently stated by the United States Supreme Court in *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 82 USPQ2d 1385, 1397 (2007), "[a] person of ordinary skill is . . . a person of ordinary creativity, not an automaton." Thus, the analysis under 35 U.S.C. § 103 "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." *Id.* at 1741, 82 USPQ2d at 1396.

Although the rigid portion of McKay's protective device is contained between two resilient outer portions, one of ordinary skill would have recognized from McKay that the properties of ABS make it desirable to use in protective devices such as Lukens' cup (McKay, col. 3, ll. 25-30). We therefore agree with the Examiner that McKay would have given one of

ordinary skill sufficient reason to make the rigid portion of Lukens' athletic cup from ABS.

Thus, we affirm the Examiner's rejection of claim 8. Because claims 7, 17, and 18 were argued in the same group as claim 8, those claims fall with claim 8. 37 C.F.R. § 41.37(c)(1)(vii).

SUMMARY

We affirm the Examiner's rejection of claims 1, 3-6, 9-11, 13-16, 19, and 20 as obvious over Lukens and Jacobs.

We also affirm the Examiner's rejection of claims 7, 8, 17, and 18 as obvious over Lukens, Jacobs, and McKay.

AFFIRMED

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