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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL J. SULLIVAN, JOHN L. NEWLINE,
THOMAS J. KENNEDY and MARK L. BINETTE

Appeal No. 2002-1026
Application No. 09/239,403

ON BRIEF

Before ABRAMS, NASE, and BAHR, Administrative Patent Judges.

ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-17, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a golf ball. An understanding of the invention can be derived from a reading of exemplary claim 1, which has been reproduced below.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Matsuki et al. (Matsuki)	4,863,167	Sep. 5, 1989
Yabuki et al. (Yabuki)	5,482,285	Jan. 9, 1996

Claims 1, 4 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yabuki.

Claims 2, 3, 5-15 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yabuki in view of Matsuki.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer (Paper No. 16) and the final rejection (Paper No. 11) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 15) and Reply Brief (Paper No. 18) 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.

The appellants explain on page 9 of the specification that while skilled golfers prefer a ball that exhibits high spin characteristics, so they can intentionally produce back spin and side spin, such a ball is not desired by less skilled golfers. They also point out that balls with high spin characteristics roll considerably less than those with low spin characteristics. The appellants characterize their invention as an improved multi-layer golf ball having one or more covers containing metal particles or other metal filler materials to enhance the interior perimeter weight of the ball, which produces a greater (higher) moment of inertia that results in less spin, reduced slicing and hooking, and further distance (specification, page 1).

Claim 1 sets forth the invention in the following manner:

> A multi-layer golf ball comprising a core, an inner cover layer and an outer cover layer having a dimpled surface, wherein said core has a diameter from 1.46 to 1.51 inches and a weight of 31-33 grams, an inner cover layer having a thickness of from 0.045-0.055 inches, a weight, with core, of 37-40 grams and an outer cover layer having a thickness of from 0.050-0.060 inches, and a weight, with core and inner core layer, of 45 to 46 grams.

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp,

227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

The examiner concluded that the subject matter in claim 1 would have been obvious in view of Yabuki. In arriving at this decision, the examiner pointed out that all of the claimed ranges either overlap or, in the case of the core weight, are so close as to have been modified by one of ordinary skill in the art “for the purpose of improving controllability and carry” (Paper No. 11, page 3). The appellants urge that there is no evidence to support the examiner’s position, arguing that the purpose in the claimed invention is to increase the moment of inertia of the ball to reduce the spin rate, while that of Yabuki is the opposite, and therefore no suggestion exists to select values from the Yabuki ranges which would fall within those specified in the claim.

We agree with the appellant that Yabuki teaches away from the appellants’ invention. Yabuki states that the objective the invention is to achieve “great carry and good controllability” (column 1, lines 29-31). To accomplish these goals, the specific gravity of the outer core is reduced, as is the weight of the outer cover, to reduce the moment of inertia, which allows the ball to spin and loft more (see column 1, lines 40-45). This is the opposite of the appellants’ construction, where the specific gravity of

the outer core is increased by increasing the weight of the outer portion of the ball, in order to increase the moment of inertia so that the ball has less spin and less carry (specification, pages 1 and 16).

The following is a comparison of the ranges recited in the appellants' claim 1 with those of Yabuki:

	Claim 1	Yabuki
Core diameter	1.46-1.51 in.	0.39-1.49 in. (Fig. 1)
Core weight	31-33 gm.	17-30.4 gm. (Table 1)
Inner cover layer thickness	0.045-0.055 in.	0.039-0.59 in. (col. 4)[1]
Weight, core and inner cover	37-40 gm.	32-39 gm. (col. 2)
Outer cover layer thickness	0.050-0.060 in.	0.055-0.106 in. (col. 4)
Weight, core and inner & outer covers	45-46 gm.	45.3 gm. (col. 7)

Comparing the ranges one by one, the lower limit of Yabuki's range for core diameter is far below that of claim 1, and the upper limit overlaps that of claim 1 only slightly. In order to come within the range of claim 1, a core diameter from only the upper 2.7% of the Yabuki range would have to be selected; 97.3% of the range would not meet the terms of the claim. As for the core weight, Yabuki's range does not overlap at all with that of the claim. In the case of the inner cover layer thickness, only the extreme lower end of the Yabuki range (1%) overlaps the claimed range if the drawing is used to

[1]Yabuki did not directly set forth the range of thickness of the inner cover, and the ranges for the diameter of the core and the inner cover overlap as denoted in Figure 1. To present the ranges in the best possible light viz-a-viz the rejection, the recited range was calculated by using 0.039 in. (1 mm.) as the minimum and 0.59 in. (15 mm.) as the maximum, based upon the dimensions given on Figure 1. However, in Yabuki's several examples (columns 5 and 6), the thickness of the inner core varied between 0.165 in. and 0.283 in.

provide the calculations so that the broadest range is presented. However, in the examples given in the reference the Yabuki ranges do not overlap those of the claim (see footnote 1). Yabuki's range for the thickness of the outer cover also overlaps by about 10% of its value at its lower end with the range specified in the claim. Only the weight of the core and inner cover, and the total weight of the ball, fall within the values recited in the claim, in which case these two factors would meet the terms of the claim no matter what value was used.

The issue here is whether one of ordinary skill in the art would have been motivated by Yabuki to select a core diameter from only the upper 2.7% of Yabuki's range and to utilize for core weight a value not even included in Yabuki's disclosed range, as well as to select an inner cover thickness from the lower 1% of Yabuki's range and an outer cover thickness from the lower 10% of Yabuki's range, in order to meet the terms of claim 1. We think not. Because the teachings of Yabuki are directed to providing a golf ball having the opposite objective than the claimed ball with regard to moment of inertia in order to achieve the opposite playing characteristics, we fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to pick and choose the values from inside and outside the ranges disclosed by Yabuki which would be necessary in order to meet the terms of the claim. From our perspective, the only suggestion for doing so resides in the luxury afforded one who first viewed the appellants' disclosure which, of course, is not a proper basis

for a rejection under Section 103. In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). We agree with the appellants that when the purposes of the ranges are different and the overlapping simply occurs by happenstance, obviousness is not present. See In re Fine, 837 F.2d 1071-1075-76, 5 USPQ2d 1596, 1600 (Fed . Cir. 1988).

It therefore is our conclusion that the teachings of Yabuki do not establish a prima facie case of obviousness with regard to the subject matter recited in claim 1, and we will not sustain the rejection of claim 1 or, it follows, of claim 4, which depends therefrom.

We reach the same conclusion, for the same reasons, with regard to independent claim 16, which stands rejected on the same basis. This claim recites a more limited range for core diameter than claim 1, and specifies identical ranges for core weight, inner cover layer thickness, and inner cover weight with core. The rejection of claim 16 is not sustained.

Dependent claims 2, 3, 5-15 and 17 stand rejected as being unpatentable over Yabuki in view of Matsuki, the latter being cited because it "discloses a well known technique of altering a multi-layer golf ball's characteristics to achieve a desired result as well as describes a golf ball having improved qualities, such as flight distance and the resistance to hook and slice." The examiner concludes, based upon the teachings of Matsuki, that "[i]t would have been obvious . . . to modify the patent to Yabuki '285 by

the material and specifications taught by Matsuki ‘167 to achieve improved characteristics” (Paper No. 11, page 4). Notably absent, however, is an explanation by the examiner of how the teachings of Matsuki render obvious each of the limitations recited in the claims against which it is applied, such as the Shore D hardness of claims 2, 3, 11 and 12, the diene polymer and ionomer of claims 4-6, 11 and 12-14, and the filler material of claims 7-10. In any event, our evaluation of Matsuki leads us to conclude that the teachings set forth therein do not overcome the shortcoming discussed above with regard to claim 1, from which these claims depend, and therefore we will not sustain the rejection of claims 2, 3, 5-15 and 17.

CONCLUSION

The rejection of claims 1, 4 and 16 as being unpatentable over Yabuki is not sustained.

The rejection of claims 2, 3, 5-15 and 17 as being unpatentable over Yabuki in view of Matsuki is not sustained.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS Administrative Patent Judge	) BOARD OF PATENT) APPEALS) AND) INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	
JENNIFER D. BAHR Administrative Patent Judge	

NEA:pgg

MICHELLE BUGBEE, ASSOCIATE PATENT COUNSEL
SPAULDING SPORTS WORLDWIDE INC.
425 MEADOW STREET
P.O. BOX 901
CHICOPEE, MA 01021-0901