

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NICOLAS HAHN DE BYKHOVETZ,
and SAID CARTO

Appeal No. 1998-2057
Application 08/331,541

ON BRIEF

Before FRANKFORT, McQUADE, and GONZALES, Administrative Patent Judges.

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 18 through 35, which are all of the claims pending in this application.¹

¹ As the appellants correctly point out at page 1 of the brief, the only claims in the application are claims 18 through 35. There is no claim 36 in the application. Thus, the references to claim 36 in the final rejection and in the notice of appeal are obvious errors.

We AFFIRM-IN-PART and REMAND.

The subject matter on appeal relates to a golf club belonging to the category of irons and to a set of iron golf clubs. According to the specification, the purpose of the invention is to offer golfers the opportunity to clear relatively high and distant obstacles with precision (page 3).

A copy of the appealed claims appears in an appendix to the brief.

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

Pfau	3,416,797	Dec.
		17, 1968

Carl Paul, Golf Clubmaking and Repair, Paul Associates, Austin, Texas, 1984, pages 193, 194, 291, 299, 344, 346-348, 363, 364, 396, 456, 457, 468 and 469 (hereinafter referred to as "Paul").

An additional reference relied upon by this panel of the Board in a remand to the examiner is:²

Divnick	5,133,553	Jul. 28,
1992		(filed Feb. 14,
1991)		

Claims 18 through 35 stand rejected under 35 U.S.C. §

² A copy of the reference is enclosed with this decision.

Appeal No. 1998-2057
Application 08/331,541

Page 3

103(a) as being unpatentable over Pfau in view of Paul.

The full text of the examiner's rejection and responses to the arguments presented by the appellants appears in the answer (Paper No. 14), while the complete statement of the appellants' arguments can be found in the brief (Paper No. 13).

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. Upon evaluation of all of the evidence before us, we find ourselves in agreement with the examiner's position with respect to claims 23 through 31, but not with respect to claims 18 through 22 and 32 through 35. Accordingly, we will sustain the examiner's rejection of appealed claims 23 through 31 under 35 U.S.C. § 103, but we will not sustain the standing 35 U.S.C.

§ 103 rejection of claims 18 through 22 and 32 through 35.

As a preliminary matter, we note that on page 5 of the brief, the appellants have indicated that the claims on appeal

may be grouped into three separate groups. In accordance with 37 C.F.R. § 1.192(c)(7), we select independent claim 23 as being representative of Group II and independent claim 28 as being representative of Group III. We have decided this appeal as to claims 23 through 31 on the basis of these claims alone, with the claims dependent on claims 23 and 28 standing or falling with their respective independent claim.

In our evaluation of the applied prior art, we have considered all of the disclosures of the respective relied upon prior art for what it fairly teaches one having ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Further, we have taken into account not only the specific teachings of the prior art relied upon, but also the inferences which one skilled in the art would reasonably be expected to draw from each disclosure. See In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In this regard, we note that we have presumed skill on the part of the artisan practicing the art here involved, rather than the converse. See In re Sovish, 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985).

We will first consider the standing 35 U.S.C. § 103(a) rejection of claim 23. Claim 23 calls for a golf club belonging to the category of irons having, inter alia, a face angle or loft greater than or equal to 35E, a lie angle less than or equal to 60E, and a head mass less than or equal to .260 kg (260 g).

Turning now to the evidence of obviousness, Pfau's object is to provide a matched set of wood golf clubs with the relative length of each club chosen to permit a uniform address and hence a uniform grooved swing regardless of the different circumstances under which the clubs are used (col. 1, lines 43-49). In order to accomplish his stated objective, Pfau makes a number of assumptions. First, Pfau assumes that the #3, #4 and #5 woods would be used to stroke the ball where the ball 10 is in a typical fairway lie with the ball resting approximately $\frac{1}{4}$ inch above the grass root top level G (col. 2, lines 23-30). Therefore, Pfau teaches that the length of the #3, #4 and #5 woods should be the same and chosen to provide the desired address in terms of the relative position of the ball, feet and hands (id. at 30-34). Second, Pfau assumes that the #2 wood is used when the ball 26 is on the fairway on

top of the grass and if a maximum distance shot is required (id. at 44-47). Under such circumstances, Pfau describes the position of the ball as being about $\frac{1}{2}$ inch above the grass root top level G (id. at 44-49). Thus, to compensate for the higher position of the ball, Pfau teaches that the length of the #2 wood must be about $\frac{3}{16}$ of an inch shorter than the #3, #4 or #5 wood (id. at 50-54). Finally, it is assumed that the driver or #1 wood is used almost exclusively for tee shots in which the ball is elevated about one inch above the grass root top level G (id. at 55-58). Therefore, in order to maintain a uniform distance D between the ball and the golfer's feet, the driver must have a length C about $\frac{3}{8}$ of an inch shorter than the #2 wood and about $\frac{9}{16}$ of an inch shorter than the #3, #4 or #5 wood (id. at 58-63).

Pfau also teaches that each club would be weighted in accordance with well-known methods so that each club would have the same swing weight. To achieve this, the driver (Pfau's shortest club of the set) would be the heaviest with the #2 wood slightly lighter, and so on (col. 2, line 70 through col. 3, line 4). In other words, Pfau teaches that as a club is shortened, weight has to be added in order to

maintain the same swing weight.

Paul is evidence that at the time of the appellants' invention it was known in the art that a standard set of iron clubs had more or less standard dimensions, such as, loft angle, lie angle, shaft length and head weight. For example, Paul discloses that a standard #6 iron would have had a loft of 34E, a lie of 60E, a head weight of 262 g and a length that would have varied depending on the golfer's fingertip to floor measurement (pages 291, 347 and 396). On page 363, Paul teaches that the standard shaft length of a #2 iron would have varied from 37.5 to 40.5 inches depending on the golfer's fingertip to floor measurement and, on page 348, that customized clubs sometimes varied in length from the recommended standard length by more than ½-inch. The reference also discusses the need for custom-made clubs, i.e., clubs which differ in length, club swing weight, loft and lie from the standard club, to suit the unusual physical characteristics, playing capabilities and/or psychological need for additional confidence.

Based on our review of Paul, we find that the closest standard iron club disclosed by Paul to the club defined in

claim 23 is the standard #6 iron. A side-by-side comparison of the claimed iron club and the standard #6 iron club disclosed by Paul reveals the following:

<u>Claim 23</u>	<u>Paul's # 6 Iron</u>
Face angle (loft) \$ 35E	Loft = 34E
Lie angle # 60E	Lie = 60E
Head mass # 260 g	Head weight = 262 g

Thus, as can be seen from the above comparison, the standard #6 iron club disclosed in Paul differs from the iron club defined in claim 23 by 1E of loft and by 2 grams of head mass.

In applying the test for obviousness,³ we reach the conclusion that it would have been obvious to one having ordinary skill in the art, from a combined assessment of the Pfau and Paul teachings, to fabricate a customized #6 iron with a loft of at least 35E, a lie of 60E or less and a head mass of 260 g or less. In our view, one of ordinary skill in the art would have been motivated to vary the loft of the

³ The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

standard #6 iron by one or more degrees in order to customize the club for a golfer who consistently hit the ball too high or too low, following the teaching in Paul at page 364. As to the head mass, Paul and Pfau clearly teach that one of ordinary skill would have increased the club length of a standard #6 iron club to compensate for a greater than average fingertip to floor distance and would have decreased the head mass or weight of the standard #6 iron in order to maintain a desired swing weight.

The appellants argue that Pfau teaches reducing the face angle and increasing the mass of the #1 or #2 wood and teaches nothing with respect to a #5 iron (brief, page 13 and 14). This argument is not persuasive because nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. See In re Merck & Co., Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986).

We now turn to the standing 35 U.S.C. § 103(a) rejection of claim 28. Claim 28 calls for a set of golf clubs belonging to the category of irons containing a series of clubs having respective lengths that vary inversely to the face angles

(as with any standard set of iron clubs) and an additional club having a face angle greater than 31E and a length which is within the length range of the clubs of the series whose face angle is between 15E and 26E.

Paul shows, at page 291, that prior to the appellants' invention a standard set of iron clubs included a #5 iron having a loft or face angle of approximately 30E and a standard length of 37.5 inches and that a club with a loft or face angle of 26E would have been a #4 iron having a length of 38 inches. In our opinion, one of ordinary skill in the art would have been motivated to vary the loft of the standard #5 iron by one or more degrees in order to customize the club for a golfer who consistently hit the ball too high or too low, following the teaching in Paul at page 364. As to the club length, Paul teaches (page 348) variations in standard club lengths by as much as ½-inch and, on rare occasions, more than ½-inch. Thus, it would have been obvious to increase the length of a standard #5 iron by ½-inch or more (making it the length of a standard #4 iron) in order to correct for arm length or unusual posture.

The appellants argue that claim 28 is not a mere

optimization of result-effective variables that would have been obvious to one of ordinary skill in the art. However, it appears that the appellants have not fully appreciated the breath of claim 28. As pointed out above, the claim is so broad as to read on a standard set of #2 to #4 irons with a customized #5 iron specifically modified by increasing the standard length by ½-inch and the loft angle by approximately 2E. It is our opinion that such a modification of a standard #5 iron would have been fairly suggested by Paul.

In view of the foregoing, we will sustain the rejection of claims 23 and 28 under 35 U.S.C. § 103. Based upon the appellants' grouping of claims, supra, the rejection of claims 24 through 27 and 29 through 31 will also be sustained since these claims stand or fall with claims 23 and 28.

However, after reviewing the combined teachings of the applied prior art, we reach the conclusion that the subject matter of claims 18 and 32 would not have been suggested to one of ordinary skill in the art at the time the invention was made. In that regard, as pointed out by the appellants, there is no suggestion, motivation, or teaching in the prior art whereby the person of ordinary skill would have been

instructed to modify one of the standard iron clubs disclosed in Paul in such a drastic manner as to arrive at a club having the characteristics set forth in claims 18 and 32.

Independent claims 18 and 32 each call for an iron club having a face angle greater than 35E (according to Paul, this would correspond to a #7 iron) and a length greater than or equal to 0.99 m (according to Paul, this would correspond to #1 or #2 iron). Considering the teachings of Pfau and Paul, we do not consider it reasonable to expect that a conventional #2 iron would have been modified by increasing its loft angle from 20E to more than 35E while maintaining a shaft length greater than or equal to 0.99 m (39 inches). Nor do we expect that one of ordinary skill would have been directed by the combined teachings of Pfau and Paul to modify a standard length #7 iron having a length of 36.5 inches by increasing its length by 2.5 inches to 39 inches while maintaining a 38E loft angle. Even considering the chart shown on page 363 of Paul, the reference teaches a maximum #2 iron shaft length of 40.5 inches for a fingertip to floor distance of over 30 inches. Using the standard ½-inch reduction in length in successively numbered clubs (see Paul, page 348), the #7 iron would have been 2.5 inches shorter than the #2 iron, i.e., 38 inches or 0.97 m. The appellants' claims 18 and 32 call for a club shaft length greater than or equal to 0.99 m (39 inches),

an inch longer than the length of a #7 iron recommended for a golfer with a fingertip to floor distance of over 30 inches. We conclude that it is highly speculative to suggest that one of ordinary skill in the art would have adjusted the length of a 38-inch #7 iron by increasing the shaft length by 1-inch, even for a severely distorted address position. Accordingly, we cannot sustain the stated rejection of claims 18 and 32 based on the disclosures in Pfau and Paul.

Claims 19 through 22 and 33 through 35, dependent on independent claim 18 or 32, contain all of the limitations of their respective independent claim. Accordingly, the examiner's rejection of claims 19 through 22 and 33 through 35 under 35 U.S.C. § 103 also cannot be sustained.

REMAND TO THE EXAMINER

We remand this application to the examiner to consider the patentability of the claimed subject matter in view of the Divnick reference and other known relevant prior art. Divnick discloses an adjustable golf club which can be adjusted to every loft position as with a complete set of conventional

clubs, including a loft angle corresponding to a sand wedge,⁴ and which according to the specification "allows the player to more precisely control the distance and height of his shots" (col. 3, lines 45-52). Divnick also teaches that the adjustable club may have a club length of 39.25 inches (.997 meters), i.e., a length greater than 0.99 meters (col. 6, line 3).

In summary, this panel of the board has:

reversed the rejection of claims 18 through 22 and 32 through 35 under 35 U.S.C. § 103(a) as being unpatentable over Pfau in view of Paul; and

affirmed the rejection of claims 23 through 31 under 35 U.S.C. § 103(a) as being unpatentable over Pfau in view of Paul.

Additionally, we have remanded the application to the examiner for consideration of issues relating to additional prior art.

The decision of the examiner is affirmed-in-part.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a remand. 37 C.F.R.

⁴ According to Paul (page 291), a conventional loft angle for a sand wedge is 55E.

§ 1.196(e) provides:

Whenever a decision of the Board of Patent Appeals and Interferences includes or allows a remand, that decision shall not be considered a final decision. When appropriate, upon conclusion of proceedings on remand before the examiner, the Board of Patent Appeals and Interferences may enter an order otherwise making its decision final.

Regarding any affirmed rejection, 37 C.F.R. § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

The effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited proceedings, the affirmed rejection is overcome. If the proceedings before the examiner does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejections, including any timely request for rehearing thereof.

This application, by virtue of its "special" status, requires an immediate action. MPEP § 708.01(d)(7th ed., July 1998).

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

AFFIRMED-IN-PART

REMANDED

	CHARLES E. FRANKFORT)	
	Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
	JOHN P. McQUADE))
APPEALS	Administrative Patent Judge)	AND
)	
INTERFERENCES)	
)	
)	
	JOHN F. GONZALES)	
	Administrative Patent Judge)	

Appeal No. 1998-2057
Application 08/331,541

Page 20

YOUNG AND THOMPSON
745 SOUTH 23RD STREET
STE. 200
ARLINGTON, VA 22202

JFG/dal

Appeal No. 1998-2057
Application 08/331,541

Page 21