

UNITED STATES PATENT AND TRADEMARK OFFICE

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

Ex parte JEFFRY A. PEGG

Appeal 2008-3479
Application 10/734,883
Technology Center 3700

Decided: September 26, 2008

Before DEMETRA J. MILLS, ERIC GRIMES, and LORA M. GREEN,
Administrative Patent Judges.

GRIMES, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a putter, which the Examiner has rejected as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

BACKGROUND

The Specification discloses “putters which, when placed in striking position, have a vertical center of mass which lies within the horizontal length of a preferred striking surface on the face of the putter so that the mass of the putter is substantially balanced with regard to the vertical axis of the putter head” (Spec. 1).

DISCUSSION

1. CLAIMS

Claims 1-8 are pending and on appeal. Claims 1 and 6 are the only independent claims and read as follows:

1. A putter comprising:
(a) a putter head having a first mass and defining a bottom face, a top face and a striking face which defines a horizontal axis and which extends in a substantially vertical plane from said bottom face toward said top face and extends at least about four inches in a plane substantially parallel with said horizontal axis to define a preferred striking area approximately centrally located on said striking face and extending a distance of approximately one inch in each direction horizontally from the horizontal mid-point of said striking face; and

(b) a shaft having a second mass and extending from the top face of said putter at an angle of from about 8° to about 25° from vertical with respect to said horizontal axis supporting a grip on the end thereof remote from said putter head and aligned so that the vertical center of mass of the putter lies within the horizontal length of said preferred striking area.

6. A putter comprising;
(a) a putter head having a toe end, a heel end, a bottom face, a top face and a striking face which defines a preferred striking area approximately centrally located on said striking face and extending approximately one inch in each direction horizontally from the horizontal midpoint of said striking face;

(b) a shaft extending from said top face of said putter head at a position between said horizontal midpoint and said toe end at an angle of from about 8° to about 25° from vertical wherein said putter head and said shaft are arranged and weighted to align the vertical center of mass thereof within the horizontal length of said preferred striking area.

Thus, both of the independent claims (and therefore all of the pending claims) require the claimed putter to have a shaft that extends from the top of the putter head “at an angle of from about 8° to about 25° from vertical” and to have a vertical center of mass that lies within a preferred striking area that extends approximately one inch in each direction from the horizontal midpoint of the striking face of the putter head.

2. OBVIOUSNESS: KITABAYASHI AND CHANDLER

Claims 1-4, 6, and 7 stand rejected under 35 U.S.C. § 103 as obvious in view of Kitabayashi¹ and Chandler² (Ans. 4). The Examiner finds that Kitabayashi discloses a putter having a shaft that extends from the putter head at an angle of 23.5° from vertical but does not disclose that the vertical center of mass lies within the preferred length of the striking area (*id.*).

The Examiner finds that Chandler “discloses a putter having a putter head and a shaft with grip wherein the vertical center of mass lies within the preferred length of the striking area” (*id.* at 5), and concludes that “[o]ne having ordinary skill in the art would have found it obvious to have the vertical center of mass within the preferred striking area, as taught by

¹ Kitabayashi, JP 2003-117033, published April 22, 2003. Our citations are to the English-language translation of record.

² Chandler, III, U.S. Patent 6,152,832, issued Nov. 28, 2000.

Chandler, III, in order to promote natural pendulum movement of the arm” (*id.*).

Appellant argues that “[n]othing in Kitabayashi discloses or suggests that the components of the putter must be arranged so that the *vertical center of mass* of the entire putter lies within the horizontal length of the preferred striking area” (App. Br. 14). Appellant argues that replacing Kitabayashi’s shaft with Chandler’s shaft would produce a putter lacking the angled shaft recited in the instant claims, and would “destroy the mode of operation of the Kitabayashi putter” (*id.* at 15). Appellant also argues that the

rejection is based solely on the Examiner’s assumptions . . . that inclined but vertically mass balanced shafts could be substituted for non-vertically mass balanced shafts because Chandler shows a vertically aligned shaft. . . . The sole basis for making such assumption is the Examiner’s belief that the prior art could be modified to produce the invention even though there is no such teaching or suggestion in the art.

(*Id.* at 19.)

We agree with Appellant that the Examiner has not adequately established that Kitabayashi and Chandler would have made obvious the putter defined by independent claims 1 and 6. Kitabayashi discloses a putter having a shaft at an angle of 23.5° from vertical, apparently because this is the angle at which the Earth’s axis of rotation is tilted. See Kitabayashi, ¶0005 (“[T]his invention is named an ‘axis putter’ . . . in order to express having made shaft inclination of a putter into the include angle of 23.5 degrees as well as the earth’s rotation axis tilt.”). The Examiner does not point to any disclosure in Kitabayashi that the angle of the shaft has any functional significance.

Chandler discloses a “putter for use with a one-handed, modified, croquet-style putting stroke” (Chandler, abstract), “in which the player stands with both feet on one side of the target line and faces the target” (*id.* at col. 2, ll. 11-12). Chandler’s putter comprises a putter head, a connector portion connected to the putter head, a straight portion connected to the connector portion, and a grip at the end of the straight portion (*id.* at Fig. 3).

Chandler teaches that the straight portion must have a length of at least eighteen inches and must diverge at least 10° from the vertical plane of the target line; both properties are required to comply with the rules of golf (*id.* at col. 10, ll. 37-48). Chandler teaches that the connector portion can be no more than five inches long (*id.* at col. 10, ll. 38-39) but it “may be of any acceptable configuration” (*id.* at col. 7, ll. 4-5).

Chandler teaches that the putter is designed such that the center of mass of the putter head is vertically aligned with the putter’s grip in the normal address position (*id.* at col. 8, ll. 45-47). Because the shaft of the putter is not vertically symmetrical, “the weight of shaft **30** will cause $C_{g, putter}$ [i.e., the center of mass of the putter overall] to be located leftward and higher than $C_{g, head}$ [i.e., the center of mass of the putter head]” when viewed from the front (*id.* at col. 8, ll. 55-58). Chandler teaches, however, that “putter head **20** can be designed so that $C_{g, putter}$ is substantially vertically aligned with the geometric center of face **22** of putter head **20**” (*id.* at col. 8, ll. 59-61).

Chandler states that the modified croquet-style stroke allowed by the disclosed putter is more effective than a traditional putting stroke because “the player may simultaneously address the putt and execute the stroke from

a position that permits both eyes to focus on the target” (*id.* at col. 2, ll. 14-16).

Chandler also discloses that “to execute a stroke with a path along the target line . . . using a traditional putting stance and stroke requires a complex combination of multi-axis rotational movements” (*id.* at col. 3, ll. 19-22). Chandler’s putter, by contrast, “is balanced such that the center of the putter face naturally hangs substantially directly below the player’s shoulder joint. This balance, along with the one-handed stroke, allows the player to swing the putter around only one pivot point, his or her shoulder joint, in a single plane that contains the intended target line.” (*Id.* at col. 4, l. 64 to col. 5, l. 2.)

Chandler teaches that “[w]hen swinging the [disclosed] putter, the player swings his or her arm in a natural manner similar to the manner in which the arms swing while walking. This type of pendulum motion within a plane containing the target line maximizes the chances that the putter face will be aligned perfectly with the target line at impact.” (*Id.* at col. 5, ll. 5-10.)

We agree with Appellant that the Examiner has not adequately shown that the putter of the appealed claims would have been obvious in view of Kitabayashi and Chandler. Kitabayashi discloses a putter having the angled shaft recited in the claims, but does not disclose that the precise angle of the shaft has any functional significance. Chandler discloses a putter having an overall vertical center of mass that can be (but does not have to be) aligned with the center of the face of the putter head. Chandler also states that the

disclosed putter can be used with a pendulum motion similar to swinging one's arms while walking, which allows for a more accurate stroke.

Chandler does not, however, state that it is by virtue of having the vertical center of mass of the overall putter aligned with the center of the putter face that the putter can be used with a natural pendulum movement of the arm. Rather, the ability to use a natural pendulum movement appears to be a consequence of the features of the putter overall, which, combined, allow the putter to be used with a one-handed croquet-style stroke. This conclusion is strengthened by Chandler's disclosure that having the vertical center of mass of the overall putter aligned with the center of the putter face is not a necessary feature of the disclosed putter. See Chandler, col. 8, ll. 52-58, and claim 1.

Therefore, we do not agree with the Examiner's conclusion that a person of ordinary skill in the art would have considered it obvious to modify Kitabayashi's putter in such a way as to put the vertical center of mass within the preferred striking area "in order to promote natural pendulum movement of the arm" (Ans. 5). The Examiner has provided no other rationale for why those skilled in the art would have combined the recited properties of the putters disclosed by Kitabayashi and Chandler, such that a putter within the scope of claims 1 and 6 would have resulted.

While the analysis under 35 U.S.C. § 103 allows flexibility in determining whether a claimed invention would have been obvious, *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007), it still requires showing that "there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id.* "We must still be careful

not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.” *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 n.3 (Fed. Cir. 2008).

We conclude that the Examiner has not made out a prima facie case that the product of independent claims 1 and 6 would have been obvious to a person of ordinary skill in the art based on Kitabayashi and Chandler. Claims 2-4 and 7 depend on either claim 1 or claim 6 and therefore incorporate their limitations. We reverse the rejection of claims 1-4, 6, and 7 under 35 U.S.C. § 103 based on Kitabayashi and Chandler.

2. OBVIOUSNESS: KITABAYASHI, CHANDLER, AND REDMAN

Claims 5 and 8 stand rejected under 35 U.S.C. § 103 as obvious in view of Kitabayashi, Chandler and Redman.³ The Examiner relies on Kitabayashi and Chandler as discussed above, and cites Redman for suggesting a marker on the top face of the putter head, as recited in claims 5 and 8 (Ans. 5).

For the reasons discussed above, we conclude that the Examiner has not adequately shown that the putter defined by the independent claims would have been obvious based on Kitabayashi and Chandler. The Examiner’s reliance on Redman to meet the limitations of dependent claims does not remedy the deficiency in the combination of Kitabayashi and Chandler. We therefore reverse the rejection of claims 5 and 8 for the reasons discussed above with respect to claims 1-4, 6, and 7.

³ Redman, U.S. Patent 1,631,504, issued June 7, 1927.

2. OBVIOUSNESS: REDMAN AND CHANDLER

Claim 1 stands rejected under 35 U.S.C. § 103 as obvious in view of Redman and Chandler (Ans. 6). The Examiner finds that Redman teaches a putter having a shaft extending from the putter head “at an angle of 65 degrees (25 degrees from a vertical axis with respect to the horizontal axis)” but does not disclose that the vertical center of mass lies in the preferred striking area (Ans. 6).

The Examiner finds that Chandler “discloses a putter having a putter head and a shaft with grip wherein the vertical center of mass lies within the preferred length of the striking area” (*id.* at 6), and concludes that “[o]ne having ordinary skill in the art would have found it obvious to have the vertical center of mass within the preferred striking area, as taught by Chandler, III, in order to reduce twisting and to promote natural pendulum movement of the arm” (*id.*).

We will reverse this rejection. The Examiner relies on the same reasoning as a basis for combining Redman and Chandler as he relied on for combining Kitabayashi and Chandler. For the reasons discussed above, we conclude that the Examiner has not adequately established that a person of ordinary skill in the art would have considered it obvious to modify Redman’s putter in such a way as to put the vertical center of mass within the preferred striking area “in order to reduce twisting and to promote natural pendulum movement of the arm” (Ans. 6).

Since the Examiner has not provided any other reason for combining the recited properties of the putters disclosed by Redman and Chandler, such that a putter within the scope of claim 1 would have resulted, he has not

Appeal 2008-3479
Application 10/734,883

shown prima facie obviousness. The rejection of claim 1 under 35 U.S.C. § 103 based on Redman and Chandler is reversed.

SUMMARY

We reverse all of the rejections on appeal.

REVERSED

Ssc:

JACK A. KANZ
502 SO. COTTONWOOD DRIVE
RICHARDSON, TX 75080