

US 20040018891A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2004/0018891 A1

(43) Pub. Date: Jan. 29, 2004

Antonious (43) Pub. 1

(54) METALWOOD TYPE GOLF CLUB HEAD HAVING EXPANDED SECTIONS VERTICALLY EXTENDING THE BALL STRIKING CLUBFACE

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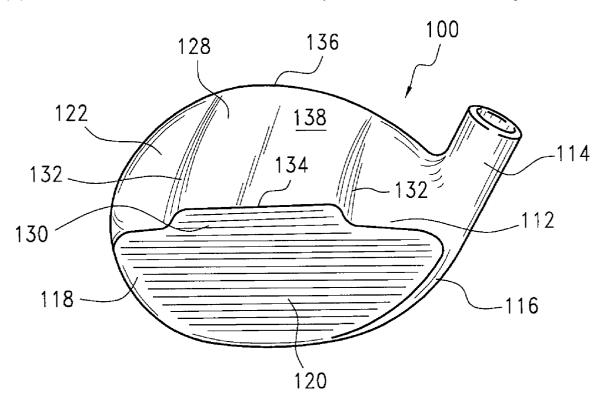
(21) Appl. No.: 10/206,063

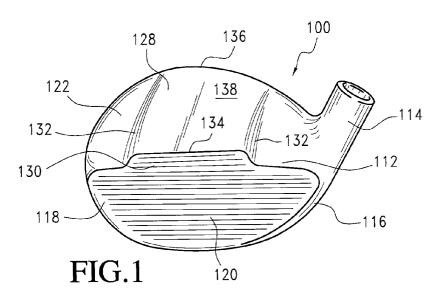
(22) Filed: Jul. 29, 2002

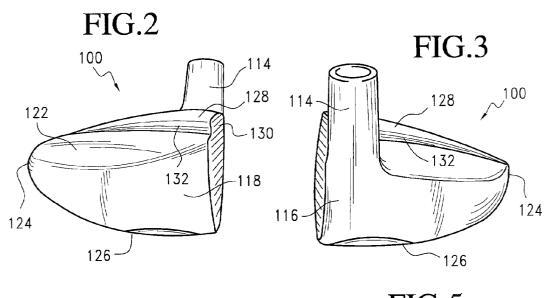
Publication Classification

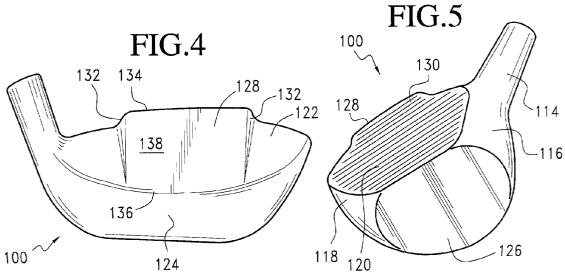
(57) ABSTRACT

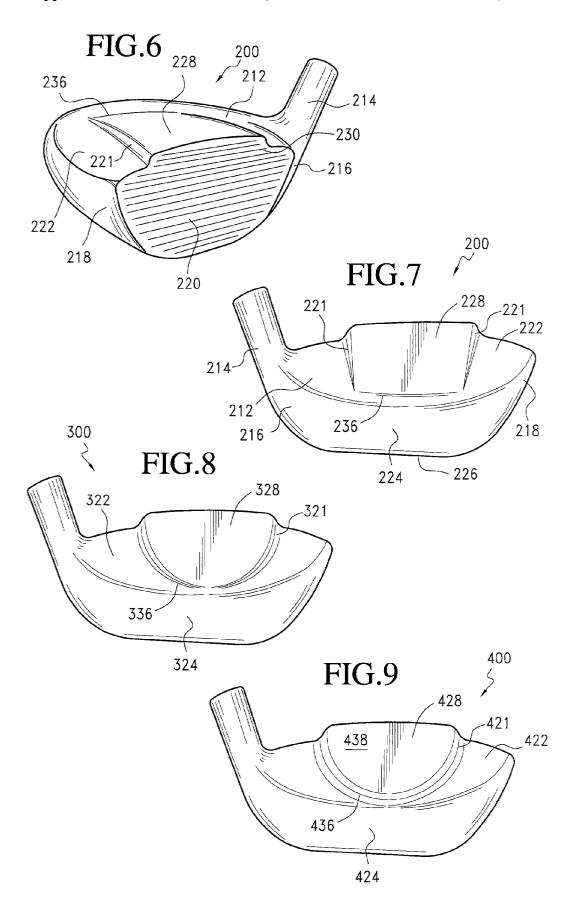
A metalwood type golf clubhead including a clubhead body having a toe, heel, upper crown surface, bottom sole surface, side surfaces, rear surface and ball-striking clubface having at least one raised, elongated, aerodynamically shaped reinforcing and stabilizing member extending outwardly from the upper and/or bottom surfaces, and having a front ball-striking surface located perpendicular to and coincident with the ball-striking clubface. The structure provides improved weight distribution for better balance, additional strength and stability to clubhead and provides more effective aerodynamic surfaces to increase clubhead speed.

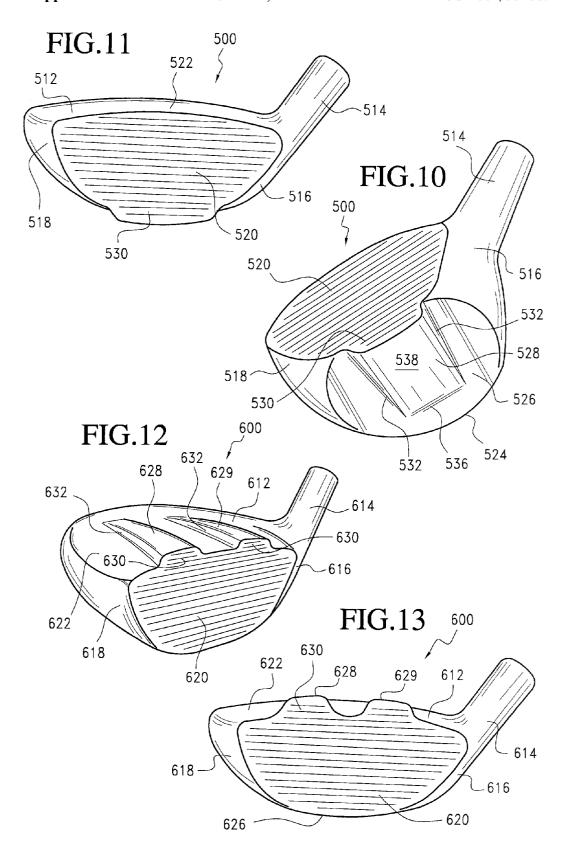


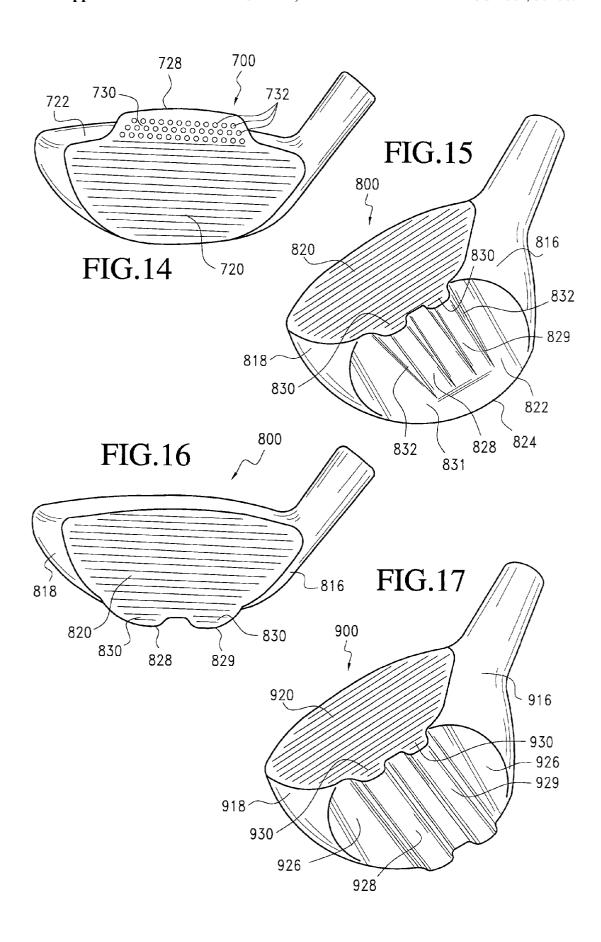


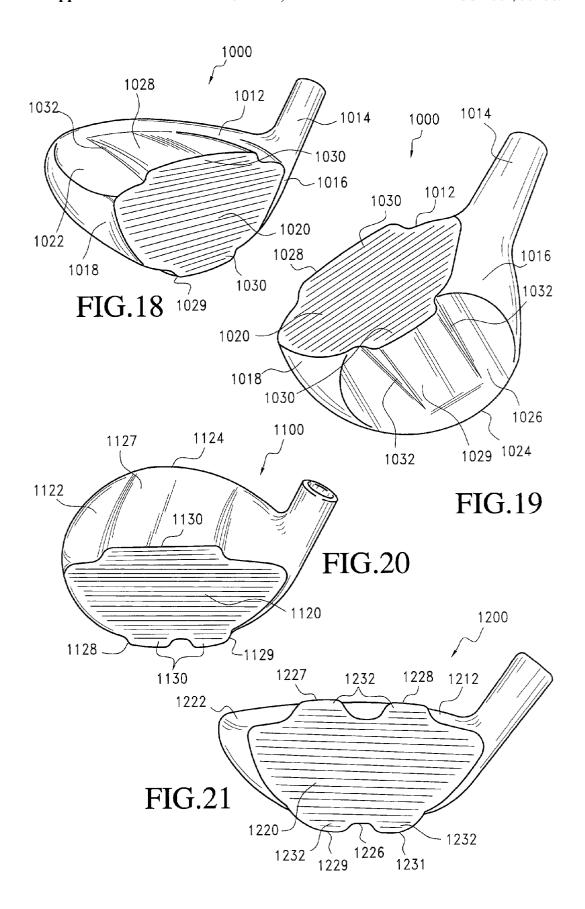












METALWOOD TYPE GOLF CLUB HEAD HAVING EXPANDED SECTIONS VERTICALLY EXTENDING THE BALL STRIKING CLUBFACE

BACKGROUND AND SUMMARY OF THE INVENTION

[0001] The present invention, specifically relates to wood-type traditional shaped clubheads having a reinforcing and stabilizing (R/S) member, including ball-striking surfaces coincident with the clubface and located verticallyin a perpendicular plane, above and/or below, the clubface of a traditional shaped clubhead.

[0002] Most wood-type traditional shaped clubheads are currently made of metal, either totally of steel, titanium, or combined with other alloys. Other clubheads include a shell made of a steel with a face insert that is made of titanium or similar lighter weight material. This permits clubheads to be much larger, yet meet the accepted weight parameters for the respective drivers and fairway type metalwoods.

[0003] Although these wood-type traditional shaped clubheads have been substantially enlarged overall, having higher clubfaces with wider, bulkier crowns and sole bottoms, their clubfaces have not increased the effective ball-contact hitting area, horizontally or vertically, proportionately to the overall enlarged clubheads for improved performance, especially for most golfers. To keep the overall clubhead size larger, and lighter, as currently demanded by most higher handicap golfers, the structural integrity of the side walls and the clubfaces, is often compromised. This causes stress cracks, unstable clubhead control at ball contact, and erratic ball flight control, resulting in loss of distance, accuracy, and inability to produce reassuring and repeating solid ball contacts, even when hit flush.

[0004] Many attempts have been made to reinforce the traditional shaped metal wood type clubheads as shown and described in the prior art. U.S. Pat. No. 3,847,399, to Raymont reinforces the back of the clubface with a honeycomb structure. My U.S. Pat. No. 5,141,230 reinforces the interior of a metalwood with a first mass located behind the ball-striking face, and my U.S. Pat. No. 5,482,279 provides an interior peripheral mass basically along the inner periphery, of the clubhead shell behind the clubface. My U.S. Pat. No. 5,989,134 reinforces the outer side walls, rear, bottom and crown areas of a wood-type golf clubhead. U.S. Pat. Nos. 4,162,794 and 4,319,752 to Thompson show golf clubheads with a downwardly projecting keel, which is coincident with the ball-striking clubface.

[0005] The ball-striking surface, on clubfaces of traditional shaped metalwood-type clubheads, diminishes dramatically, from the actual point where the crown or top section interfaces with the uppermost portion of the clubface. From this upper demarcation point or common border of the clubface, the outer shape, at both the toe and heel sections of the clubface, are traditionally in a downward and inward direction. his greatly reduces the size of the ball-contact area, available on the traditional shaped metalwood clubfaces. Various attempts at enlarging the ball contact area have been made by altering the overall shape of the clubhead, as shown in the patents to Adams, U.S. Pat. Nos. 5,465,970 and 5,931,745, among others.

[0006] A primary concept of the present invention provides traditional shaped wood-type golf clubheads with at

least one raised reinforcing and stabilizing member, which adds additional ball striking area to a traditional-sized ballstriking clubface, either upwardly or downwardly in a vertical direction when the clubhead is on the ground surface in a normal address position. This increased ball contact area of the RIS member is specifically formed in a perpendicular or vertical plane, in a top to bottom direction of the clubface. The addition of the reinforcing and stabilizing member of the present invention, includes a ball-striking surface coincident with and located perpendicular to a traditionally, diminished size, shaped clubface, increases the overall height of the ball striking clubface, providing a considerably expanded area to strike a golf ball. The smaller raised reinforcing and stabilizing (R/S) member formed above or below the clubface will always be substantially shorter in a heel to toe direction; than the traditional sized clubhead body.

[0007] Lower handicap golfers, may prefer a smaller traditional shaped clubhead with effective, expanded ball-striking surfaces located above and/or below the clubface. This R/S embodiment locates a much larger concentration of mass above the clubface and closer to the center of gravity and produces a more solid response from ball-contacts, which are made closer to the center of gravity, by the most proficient golfers.

[0008] The versatile concept of the present invention includes distinctively different aerodynamically designed reinforcing and stabilizing members that perform totally different functions on the clubheads, independently of each other. The ball-striking surfaces that are coincident with and/or perpendicular to the clubface may be located separately and/or independently, at different sections of the clubhead, to produce preferred and specifically different functions. The unique structural concept of the present invention permits combining the advantages of distinctively different reinforcing and stabilizing R/S members, in shape and size, which are formed at different locations on the clubhead. The frontal ball striking surfaces of the reinforcing and stabilizing R/S members are coincident with and perpendicular to the clubface on the traditional shaped clubhead to produce improved functions in a superior high-performing clubhead.

[0009] Locating a reinforcing and stabilizing member with ball-string surfaces coincident with the clubface, above and/or below the clubface, substantially increases the reduced ball-striking area on the clubface of a traditional shaped clubhead. In addition, the unusual structure of the present invention, not only minimizes or eliminates undesirable shocks and vibrations of "thin" shots, but produces a most formidable clubhead stability, even when the most severe off-center ball contacts occur at the extreme toe, heel or lowest portion of the clubface.

[0010] A first preferred embodiment of the present invention includes at least one raised reinforcing and stabilizing (R/S) member, with a front ball-striking surface that forms only a downsized smaller top crown section on a traditional shaped clubhead located above and perpendicular to the clubface, which vertically expands the hitting area of the clubface of a traditional shaped clubhead, in a top to bottom direction. The R/S front ball-striking surface extends to and is coincident with a central, upper portion of the ball-striking surface of the clubface. The multi-functional capabilities of

the reinforcing and stabilizing member, provides an upwardly expanded, centrally located, ball-contact area that creates a deeper-type clubface on a traditional shaped clubhead. The reinforcing and stabilizing member with a frontal ball-striking surface can be coincident with and located perpendicular to the lower portion and/or the upper portion of the clubface, enlarging it substantially in a vertical direction, thereby providing additional ball-striking area on the clubface of a traditional shaped metalwood-type golf clubhead.

[0011] The reinforcing and stabilizing member is located on an upper portion of the clubhead and includes a front ball-striking surface that extends to and is coincident with the central upper portion of the ball-striking clubface.

[0012] Another preferred embodiment of the present invention, provides a reinforcing and stabilizing member with a ball-striking surface, located below and perpendicular to the clubface. This unique additional expanded hitting area below the clubface, is formed by a front ball-striking surface of the reinforcing and stabilizing member, which is coincident with and below the clubface, and is located on the bottom of a traditional shaped clubhead. The reinforcing and stabilizing member extends rearwardly from the ball-striking clubface. This embodiment of the present invention, provides an reinforcing and stabilizing member, including a front ball striking surface, located at the extreme lower portion of the clubface. The lower reinforcing and stabilizing member, located on the bottom of a traditional shaped clubhead, and having a ball striking surface coincident with and perpendicular to the clubface, extends rearwardly therefrom.

[0013] Another embodiment includes two distinctively separated reinforcing and stabilizing members, both including front ball-striking surfaces located above and perpendicular to the clubface of a traditional shaped clubhead.

[0014] Still another embodiment includes two separated reinforcing and stabilizing R/S members including front ball-striking surfaces located below and perpendicular to the clubface of a traditional shaped clubhead.

[0015] Yet another embodiment includes two separated reinforcing and stabilizing R/S members including front ball-striking surfaces, one located above the clubface and another located below the clubface, both perpendicular to the clubface of a traditional shaped clubhead.

[0016] Other objects, advantages and salient features of the invention will become apparent from the following detailed description, which taken in conjunction with the annexed drawings, discloses a preferred, but non-limiting, embodiment of the subject invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. 1 is a top perspective view of a first embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0018] FIG. 2 is a toe end elevational view of the clubhead of FIG. 1.

[0019] FIG. 3 is a heel end elevational view of the clubhead of FIG. 1.

[0020] FIG. 4 is a rear elevational view of the clubhead of FIG. 1

[0021] FIG. 5 is a bottom perspective view of the clubhead of FIG. 1

[0022] FIG. 6 is a front perspective view of a second embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0023] FIG. 7 is a rear elevational view of the clubhead of FIG. 6.

[0024] FIG. 8 is a rear elevational view of a third embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0025] FIG. 9 is a rear elevational view of a forth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0026] FIG. 10 is a bottom-front perspective view of a fifth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0027] FIG. 11 is a front elevational view of the clubhead of FIG. 10.

[0028] FIG. 12 is a front perspective view of a sixth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0029] FIG. 13 is a front elevational view of the clubhead of FIG. 12.

[0030] FIG. 14 is a front elevational view of a seventh embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0031] FIG. 15 is a bottom-front perspective view of a eighth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0032] FIG. 16 is a front elevational view of the clubhead of FIG. 15.

[0033] FIG. 17 is a bottom-front perspective view of a ninth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0034] FIG. 18 is a front perspective view of a tenth embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0035] FIG. 19 is a bottom-front perspective view of the clubhead of FIG. 18.

[0036] FIG. 20 is a top perspective view of a eleventh embodiment of a metalwood type golf clubhead in accordance with the present invention.

[0037] FIG. 21 is a front elevational view of a twelfth embodiment of a metalwood type golf clubhead in accordance with the present invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0038] FIGS. 1 to 5 illustrate a first embodiment of a golf clubhead 100 in accordance with the present invention, including a clubhead body 112, hosel 114, heel 116, toe 118, ball striking clubface 120, upper surface 122, rear surface 124 and bottom sole 126. A single reinforcing and stabilizing member 128, having an aerodynamic, airfoil type shape, extends upwardly from the upper surface 122, in a vertical direction when the clubhead 100 is viewed in a normal

address position, that is with the bottom sole resting on grass or similar support surface. The reinforcing and stabilizing member 128 has a front ball striking surface 130 which is perpendicular to and coincident with the ball striking clubface 120, thereby enlarging and extending the ball striking clubface 120 upwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead 100. The location of the reinforcing and stabilizing member 128 on the upper surface 122 moves a portion of the overall weight to the upper part of the clubhead 100. The reinforcing and stabilizing member 128 is disposed toward and terminates at the rear surface 124 of the clubhead 100. The reinforcing and stabilizing member 128 includes side wall surfaces 132 which are generally parallel to each other and perpendicular to the ball striking clubface 120. The top of the reinforcing and stabilzing member 128 forms a top crown surface 138 on the clubhead body 112.

[0039] FIGS. 6 and 7 illustrate a second embodiment of a golf clubhead 200 in accordance with the present invention, including a clubhead body 212, hosel 214, heel 216, toe 218, ball striking clubface 220, upper surface 222, sidewalls 221, rear surface 224 and bottom sole 226. A single reinforcing and stabilizing member 228, having an aerodynamic, airfoil type shape, extends upwardly from the upper surface 222. The reinforcing and stabilizing member 228 has a front ball striking surface 230 which is located above, perpendicular to and coincident with the ball striking clubface 220, thereby enlarging and extending the ball striking clubface 220 upwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead 200. This embodiment is similar to the embodiment described with reference to FIGS. 1 to 5 with the exception that the single reinforcing and stabilizing member 228 terminates before reaching the rear surface 224.

[0040] FIG. 8 illustrates a third embodiment of a golf clubhead 300 in accordance with the present invention, having a single reinforcing and stabilizing member 328, having an aerodynamic, airfoil type shape, extends upwardly from the upper surface 322 and sidewalls 321. In this embodiment the reinforcing and stabilizing member 328 has a generally curved rear edge 336 adjacent the rear surface 324 to provide smooth aerodynamic airflow at the back of the clubhead 300.

[0041] FIG. 9 illustrates a forth embodiment of a golf clubhead 400 in accordance with the present invention, including a single reinforcing and stabilizing member 428, having an aerodynamic, airfoil type shape, extending upwardly from the upper surface 422 and sidewalls 421. In this embodiment the reinforcing and stabilizing member 428 has a generally curved rear edge 436 adjacent the rear surface 424 and has a significantly higher top crown 438. This structure provides significantly more ball striking front surface (not shown) as well as providing greater aerodynamic airflow surface area.

[0042] FIGS. 10 and 11 illustrate a fifth embodiment of a golf clubhead 500 in accordance with the present invention, including a clubhead body 512, hosel 514, heel 516, toe 518, ball striking clubface 520, upper surface 522, and bottom sole 526. A single reinforcing and stabilizing member 528, having an aerodynamic, airfoil type shape, extends down-

wardly from the bottom sole 526, in a vertical direction when the clubhead 500 is viewed in a normal address position, that is with the bottom sole resting on grass or similar support surface. The reinforcing and stabilizing member 528 has a front ball striking surface 530 which is located below, perpendicular to and coincident with the ball striking clubface 520, thereby enlarging and extending the ball striking clubface 520 downwardly creating additional bail striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead 500. The location of the reinforcing and stabilizing member 528 on the bottom sole 526 moves a portion of the overall weight to the lower part of the clubhead 500. The reinforcing and stabilizing member 528 is disposed rearwardly 536 short of the rear surface 524 of the clubhead 500. The reinforcing and stabilizing member 528 includes side wall surfaces 532 which are generally parallel to each other and perpendicular to the ball striking clubface 520. The outer surface 538 of the reinforcing and stabilizing member 528 also forms a ground engaging surface to stabilize the clubhead 500 when ground contact occurs during the execution of a golf swing.

[0043] FIGS. 12 and 13 illustrate a sixth embodiment of a golf clubhead 600 in accordance with the present invention, including a clubhead body 612, hosel 614, heel 616, toe 618, ball striking clubface 620, upper surface 622, and bottom sole 626. A pair of reinforcing and stabilizing members 628 and 629, having an aerodynamic, airfoil type shape, extend upwardly from the upper surface 622, in a vertical direction when the clubhead 600 is viewed in a normal address position, that is with the bottom sole resting on grass or similar support surface. A first reinforcing and stabilizing member 628 is located on the upper surface 622 proximate the toe 618, whereas the second reinforcing and stabilizing member 629 is located on the upper surface 622 proximate the heel 616. Each reinforcing and stabilizing member 628 and 629 has a front ball striking surface 630 which is located above, perpendicular to and coincident with the ball striking clubface 620, thereby enlarging and extending the ball striking clubface 620 upwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead **600**. The location of the reinforcing and stabilizing members 628 and 629 moves a portion of the overall weight to the outer parts of the clubhead 600, thereby effectively increasing the Moment of Inertia of the clubhead 600 when needed. The reinforcing and stabilizing members 628 and 629 are disposed toward and terminate short of the rear surface 624 of the clubhead 600. The reinforcing and stabilizing members 628 and 629 each includes side wall surfaces 632 which are generally parallel to each other and perpendicular to the ball striking clubface 620.

[0044] FIGS. 14 illustrates a seventh embodiment of a golf clubhead 700 in accordance with the present invention, including a clubhead body 700 having a reinforcing and stabilizing member 728 with a front ball striking surface 730 extending upwardly from upper surface 722 located above, perpendicular to and coincident with ball striking clubface 720. This embodiment is identical to the embodiment of FIGS. 1 to 5 except for the addition of punch marks 732 on the front ball-striking surface 730 of the R/S 728.

[0045] FIGS. 15 and 16 illustrate a eighth embodiment of a golf clubhead 800 in accordance with the present inven-

tion, which is similar to the clubhead described with reference to FIGS. 10 and 11. The clubhead 800 includes a pair of reinforcing and stabilizing members 828 and 829, having an aerodynamic, airfoil type shape, extend downwardly from the bottom sole 831, in a vertical direction when the clubhead 800 is viewed in a normal address position, that is with the bottoms of 828 and 829 resting on grass or similar support surface. A first reinforcing and stabilizing member 828 is located on the bottom sole 831 proximate the toe 818, whereas the second reinforcing and stabilizing member 829 is located on the bottom sole 822 proximate the heel 816. Each reinforcing and stabilizing member 828 and 829 has a front ball striking surface 830 which is located below, perpendicular to and coincident with the ball striking clubface 820, thereby enlarging and extending the ball striking clubface 820 downwardly creating additional ball striking surface below clubface 820 to provide a greater margin for error when golf balls are struck away from the center portion of the clubface 820. The location of the reinforcing and stabilizing members 828 and 829 moves a portion of the overall weight to the outer parts of the clubhead 800, thereby increasing the Moment of Inertia potential of the clubhead 800. The reinforcing and stabilizing members 828 and 829 are disposed rearwardly short of the rear surface 824 of the clubhead 800. The reinforcing and stabilizing members 828 and 829 each includes side wall surfaces 832 which are generally parallel to each other, perpendicular to the ball striking clubface 820 and taper toward the rear surface 824.

[0046] FIG. 17 illustrates a ninth embodiment of a club head 900 in accordance with the present invention. This clubhead 900 is similar to the embodiment described with reference FIGS. 15 and 16 and includes a pair of reinforcing and stabilizing members 928 and 929, having an aerodynamic, airfoil type shape, extending downwardly from the bottom sole 926. Each reinforcing and stabilizing member 928 and 929 has a front ball striking surface 930 which is located below, perpendicular to and coincident with the ball striking clubface 920, thereby enlarging and extending the ball striking clubface 920 downwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead 900. A first reinforcing and stabilizing member 928 is located on the bottom sole 926 proximate the toe 918, whereas the second reinforcing and stabilizing member 929 is located on the bottom sole 926 proximate the heel 916. In this embodiment, the reinforcing and stabilizing members 928 and 929 extend to the rear surface (not shown) and remain at the same height along the bottom sole 926 in a front to rear direction.

[0047] Various combinations and locations of reinforcing and stabilizing members maybe formed on a conventional or traditional shaped golf clubhead depending upon various characteristics that are preferred by a particular golfer. Single or multiple reinforcing and stabilizing members maybe provided on the upper and/or the bottom sole locations on a golf clubhead, and /or combinations thereof.

[0048] For example, FIGS. 18 and 19 illustrate a tenth embodiment of a golf clubhead 1000 in accordance with the present invention, including a clubhead body 1012, hosel 1014, heel 1016, toe 1018, ball striking clubface 1020, upper surface 1022, and bottom sole 1026. Two reinforcing and stabilizing members 1028 and 1029, having an aerodynamic, airfoil type shape, extend outwardly from the clubhead body

1012, in a vertical direction when the clubhead 1000 is viewed in a normal address position, that is with the bottom sole resting on grass or similar support surface. A first reinforcing and stabilizing member 1028 is located on the upper surface 1022 above ball-striking clubface 1020, whereas the second reinforcing and stabilizing member 1029 is located on the bottom sole 1026. Each reinforcing and stabilizing member 1028 and 1029 has a front ball striking surface 1030 which is located perpendicular to and coincident with the ball striking clubface 1020, thereby enlarging and extending the ball striking clubface 1020 upwardly and downwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubhead 1000. The location of the reinforcing and stabilizing members 1028 and 1029 moves a portion of the overall weight to the outer parts of the clubhead 1000, thereby increasing the effectiveness as needed for the Moment of Inertia of the clubhead 1000. The reinforcing and stabilizing members 1028 and 1029 are disposed toward and terminate short of the rear surface 1024 of the clubhead 1000, although it will be appreciated one or both may extend all the way to the rear surface 1024. The reinforcing and stabilizing members 1028 and 1029 each includes side wall surfaces 1032 which are generally parallel to each other and perpendicular to the ball striking clubface 1020.

[0049] FIG. 20 illustrates an eleventh embodiment of a golf clubhead 1100 in accordance with the present invention, including three reinforcing and stabilizing members 1127, 1128 and 1129, each having an aerodynamic, airfoil type shape, and extending outwardly from the clubhead body 1112, in a vertical direction when the clubhead 1100 is viewed in a normal address position, that is with the bottom sole resting on grass or similar support surface. A first reinforcing and stabilizing member 1127 is located on the upper surface 1122 above clubface 1120, whereas the second and third reinforcing and stabilizing members 1128 and 1129 are located on the bottom sole 1126. Each of the three reinforcing and stabilizing members 1127, 1128 and 1129 has a front ball striking surface 1130 which is perpendicular to and coincident with the ball striking clubface 1120, thereby enlarging and extending the ball striking clubface 1120 upwardly and downwardly creating additional ball striking surfaces to provide a greater margin for error when golf balls are struck away from the center of the clubhead 1100. The reinforcing and stabilizing members 1127,1128 and 1129 are disposed toward and may extend to or terminate short of the rear surface 1124 of the clubhead 1100.

[0050] FIG. 21 illustrates a twelfth embodiment of a golf clubhead 1200 in accordance with the present invention, including two pair of reinforcing and stabilizing members 1227 and 1228 and 1229 and 1231. Each of the four of reinforcing and stabilizing members 1227 and 1228 and 1229 and 1231 has an aerodynamic, airfoil type shape, and extend outwardly from the clubhead body 1212, in a vertical direction when the clubhead 1200 is viewed in a normal address position, that is with the bottom sole resting on grass or similar support surface. A first pair of reinforcing and stabilizing members 1227 and 1228 are located on the upper surface 1222 above clubface 1220, whereas a second pair of reinforcing and stabilizing members 1229 and 1231 are located on the bottom sole 1226. Each of the reinforcing and stabilizing members 1227 and 1228 and 1229 and 1231 has a front ball striking surface 1232 which is perpendicular to

and coincident with the ball striking clubface 1220, thereby enlarging and extending the ball striking clubface 1220 upwardly and downwardly creating additional ball striking surface to provide a greater margin for error when golf balls are struck away from the center of the clubface 1220. The reinforcing and stabilizing members 1227 and 1228, 1229 and 1231 are disposed toward and may extend to or terminate short of the rear surface 1224 of the clubhead 1200.

- [0051] While various preferred embodiments have been shown and described, it will be understood that there is no intent to limit the invention by such disclosure, but rather, is intended to cover all modifications and alternate constructions falling within the spirit and scope of the invention as defined in the appended claims.
- 1. A metalwood type golf clubhead including a clubhead body with a toe, heel, upper surface, bottom sole surface, side wall surfaces, rear surface and ball-striking clubface, wherein the improvement comprises:
 - at least one reinforcing and stabilizing member extending outwardly from said clubhead body said reinforcing and stabilizing member providing smooth aerodynamic surfaces to said clubhead;
 - said reinforcing and stabilizing member being located in a vertical direction relative to said ball striking clubface and further including a front ball-striking surface coincident with and located perpendicular to said ball striking clubface, providing increased ball striking area on said clubface.
- 2. The metalwood type of golf clubhead of claim 1 wherein said reinforcing and stabilizing member is located adjacent to and above said upper surface to form a top crown on said upper surface of clubhead said reinforcing and stabilizing member including a ball-striking surface coincident with an upper portion of said ball striking clubface.
- 3. The metalwood type of golf clubhead of claim 1 wherein said reinforcing and stabilizing member is located below said ball-striking clubface; said reinforcing and stabilizing member including a front ball-striking surface coincident with a lower portion of said ball striking clubface.
- **4**. The metalwood type of golf clubhead of claim 1 wherein said reinforcing and stabilizing member extends rearwardly from said ball striking clubface in a direction toward said rear surface.
- **5**. The metalwood type of golf clubhead of claim 4 wherein said reinforcing and stabilizing member terminates adjacent said rear surface.
- **6**. The metalwood type of golf clubhead of claim 4 wherein said reinforcing and stabilizing member terminates partway toward said rear surface.
- 7. The metalwood type of golf clubhead of claim 4 wherein said reinforcing and stabilizing member terminates in a parabolic shape adjacent said rear surface.
- **8**. The metalwood type of golf clubhead of claim 1 wherein said clubhead body is traditional in shape.
- **9**. The metalwood type of golf clubhead of claim 1 being further defined by a plurality of reinforcing and stabilizing members.

- **10**. The metalwood type of golf clubhead of claim 9 wherein said reinforcing and stabilizing members are located on said upper surface of said clubhead.
- 11. The metalwood type of golf clubhead of claim 9 wherein said reinforcing and stabilizing members are located on said bottom sole of said clubhead.
- 12. The metalwood type of golf clubhead of claim 9 being further defined by said plurality of reinforcing and stabilizing members including a first reinforcing and stabilizing member on said upper surface and a second reinforcing and stabilizing member on said bottom sole.
- 13. The metalwood type of golf clubhead of claim 9 wherein said reinforcing and stabilizing members extend from said ball striking face rearwardly to a location short of said rear surface.
- 14. The metalwood type of golf clubhead of claim 10 further including an additional reinforcing and stabilizing member on said bottom sole.
- 15. The metalwood type of golf clubhead of claim 11 further including an additional reinforcing and stabilizing member on said upper surface.
- 16. A metalwood type golf clubhead including a clubhead body with a toe, heel, upper crown surface, bottom sole surface, side wall surfaces, rear wall surface and ball-striking clubface, wherein the improvement comprises:
 - a plurality of reinforcing and stabilizing members extending outwardly from said clubhead body to form the outermost perimeter weighting of said clubhead and providing smooth profile, aerodynamic surfaces to said clubhead:
 - said reinforcing and stabilizing members being centrally located on said clubhead body in a vertical direction relative to said ball-striking clubface; said reinforcing and stabilizing members including ball-striking surfaces coincident with and perpendicular to said ball striking clubface.
- 17. The metalwood type of golf clubhead of claim 16 being further defined by said reinforcing and stabilizing members being located on said upper surface of said clubhead.
- 18. The metalwood type of golf clubhead of claim 16 being further defined by said reinforcing and stabilizing members being located on said bottom sole surface of said clubhead.
- 19. The metalwood type of golf clubhead of claim 16 being further defined by a first pair of said reinforcing and stabilizing members being located on said upper surface of said clubhead and a second pair of said reinforcing and stabilizing members being located on said bottom sole surface.
- **20**. The metalwood type of golf clubhead of claim 1 wherein said ball-striking surface of said reinforcing and stabilizing member includes an array of punch marks.
- 21. The metalwood type of golf clubhead of claim 8 wherein said ball-striking clubface outer configuration conforms to the clubface shape of a traditional shaped metalwood clubhead.

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