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### (54) TABLE TENNIS PADDLE

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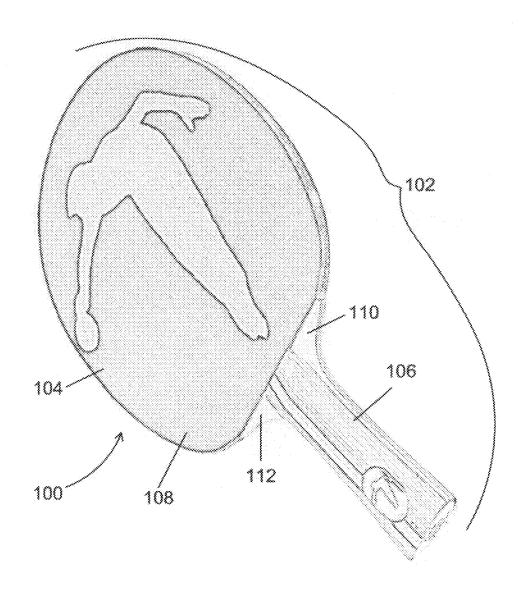
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### (57) ABSTRACT

A novel and useful table tennis paddle for use during the play of any racket or paddle sport but preferably table tennis is provided and includes: a blade having a head and a handle extending from the head. The blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer. Moreover, the first layer preferably comprises three sub-layers, the second layer preferably comprises one sub-layer, the third layer preferably comprises one layer, and the fifth layer preferably comprises three sub-layers.



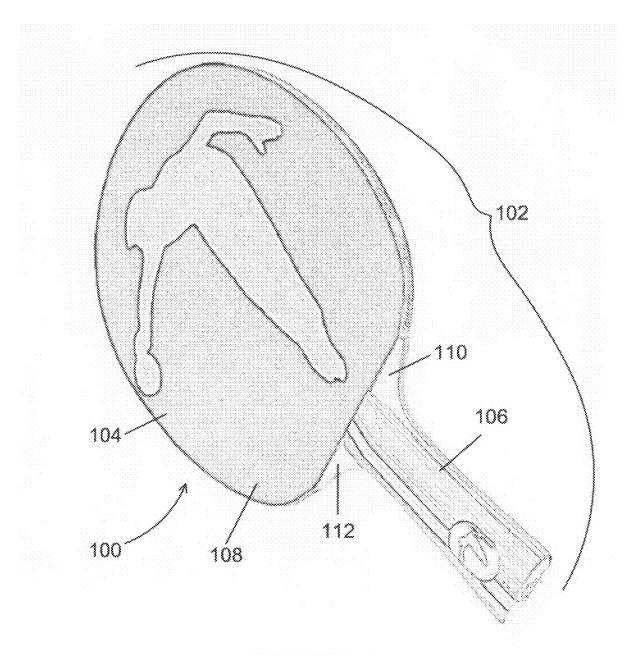


FIGURE 1

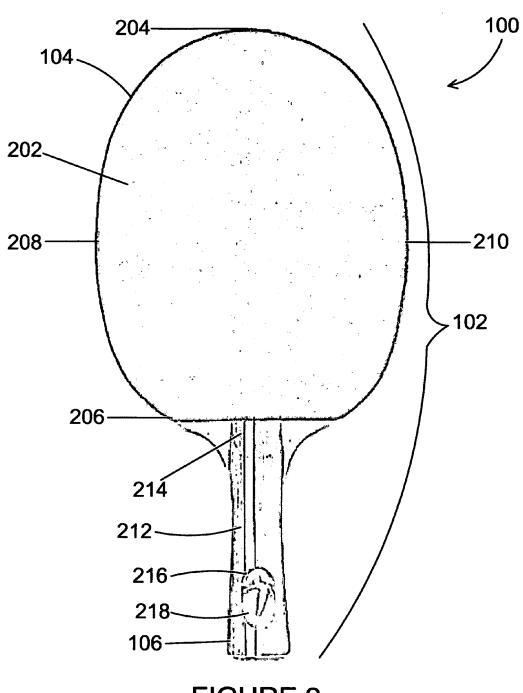


FIGURE 2

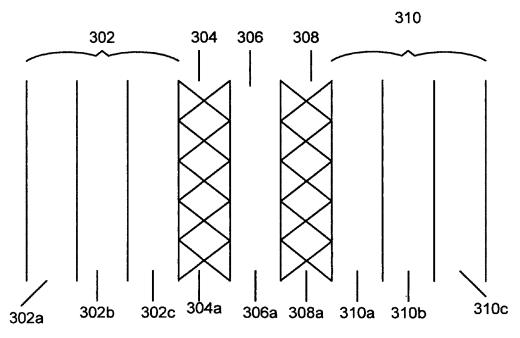
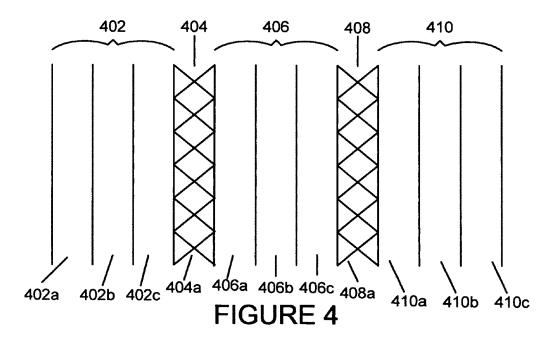


FIGURE 3



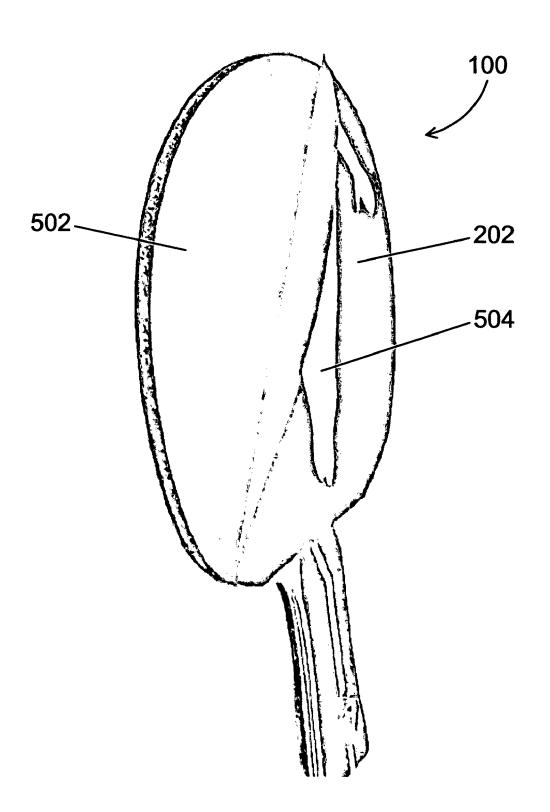
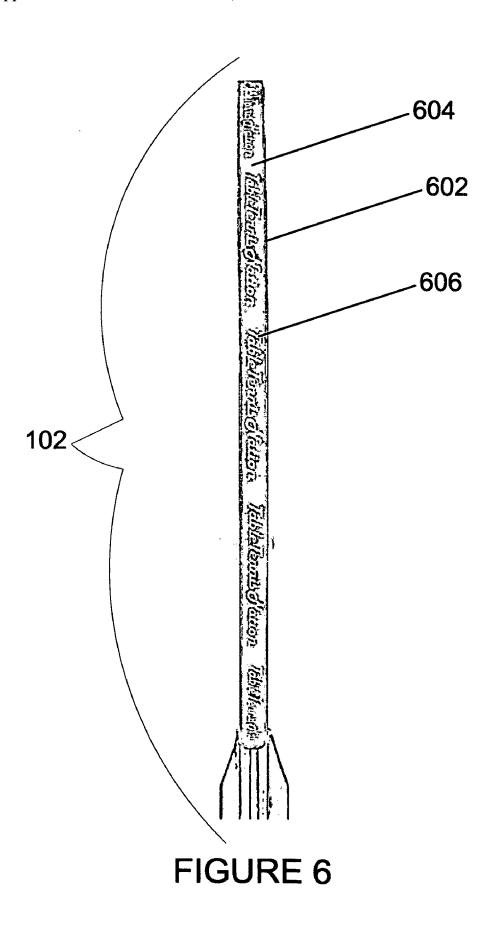


FIGURE 5



### TABLE TENNIS PADDLE

## CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Pursuant to 35 U.S.C. §119(e) this non-provisional application claims the benefit of provisional application No. 61/399,335 filed Jul. 12, 2010 and provisional application No. 61/401,131 filed Aug. 9, 2010, the entire contents of both provisional applications are herein incorporated by reference.

### FIELD OF THE INVENTION

[0002] This invention relates generally to table tennis, also commonly referred to as ping-pong, and, more particularly, to a new and useful table tennis paddle for use in playing table tennis.

### BACKGROUND OF THE INVENTION

[0003] The sport of table tennis or ping-ping, as it is commonly referred to, is most analogous to tennis. While table tennis is scored differently than tennis, the general objective is the same. That is, the goal of table tennis is to strike a ball, using a racket or paddle, over a net and passed the opponent. The equipment required to play table tennis is generally a paddle, a table tennis ball, a table, and a net stretched across the middle of the table.

[0004] While a relatively young sport, table tennis has rapidly increased in popularity around the world, especially in the United States. Essential to one's success in table tennis is the paddle used by the player. Moreover, with the growing popularity of table tennis, there is a need for a paddle that makes the game of table tennis easier to play and, more specifically, that provides better control of the ball during play. Traditional paddles commonly comprise a single layer, flat panel or blade that is fixed to a handle. This configuration often results in a rigid paddle with a small "sweet spot," therefore, resulting in more erratic shots by the user and less control over the ball.

### SUMMARY OF INVENTION

[0005] Due to the current shortcomings in this field, as outlined above, there is a need, for a new and useful table tennis paddle that is configured to, among other things, make the game of table tennis easier to play for its users and provide increased control over the ball.

[0006] One aspect of an embodiment is to overcome these and other drawbacks of previous inventions.

[0007] Another aspect of an embodiment is to make table tennis easier and more exciting for all players at all skill levels.

[0008] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that makes it significantly easier for beginners to learn to play table tennis and carry on a game or rally.

[0009] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that allows intermediate, advanced and/or expert players to have longer rallies and to increase the power and control of their shots.

[0010] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that improves the touch and feel experienced by a player using the table tennis paddle while playing table tennis. The touch and feel experienced by the player while playing table tennis with the table tennis

paddle is improved by providing the table tennis paddle with a playing surface or outer layer that is constructed from a generally soft material.

[0011] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that improves the consistency on the whole face of the table tennis paddle and makes approximately the entire face of the table tennis paddle a "sweet spot." The consistency on the whole face of the table tennis paddle experienced by the player and the "sweet spot" of the table tennis paddle is improved by providing the table tennis paddle with at least one inside layer that is constructed from a generally hard material.

[0012] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that provides players with more surface area to strike the ball. The table tennis paddle features an increased playing surface or face size, which is seven inches at its longest and six and a half inches at its widest.

[0013] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that is more flexible and easier to hold

[0014] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that is strong and durable yet also flexible.

[0015] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle that allows most, if not all, shots to feel the same.

[0016] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle that allows for a larger margin of error on the part of the player, which minimizes errant shots.

[0017] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle that allows players to make better shots with increased control and power.

[0018] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle that does not wear down the ball yet holds the ball long enough, while a shot is occurring, to give players a chance to aim the shot and place the ball in a specific area on the other side of the net.

[0019] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle with a playing surface or face that is customizable.

[0020] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle with a playing surface or face that is replaceable.

[0021] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle with a handle of a particular length according to the player's choice.

[0022] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle that allows a player to utilize new types of shots.

[0023] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle with a handle that is customizable.

[0024] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle with a handle that makes it easier for the player to hold and maneuver the paddle.

[0025] Yet another aspect of an embodiment is to provide a useful and novel table tennis paddle containing a tape or ribbon attached along the circumference or on the side surface of the blade of the paddle. This tape or ribbon may be customizable and replaceable.

[0026] In a first non-limiting aspect of an embodiment, a paddle for use during the play of any racket or paddle sport but

preferably table tennis is provided and includes: a blade having a head and a handle extending from the head. The blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer. The blade preferably comprises a first outer surface on one side of the blade and a second outer surface on the opposing side of the blade, whereby at least one playing surface or face of the paddle is coupled to the first outer surface, the second outer surface or both surfaces. Preferably, the playing surface(s) are customizable and/or replaceable and may be constructed from any one of the following materials: sandpaper, rubber, sponge, carbon fiber, sand, diamond dust, plastic, and the like. It should be appreciated that the playing surface(s) or face may be constructed from any material without limiting the scope of the present invention. Moreover, the head is generally in the shape of an oval and at its longest section (from the tip of the blade to the top of the handle) is approximately 7 inches long and at its widest section is 6.5 inches wide. Preferably, the blade further comprises two curvatures that extend from the head and into the handle. The handle preferably comprises two gripping members coupled to opposing sides of the handle, each gripping member having a proximal end located in close proximity to the blade and an opposing distal end. The proximal end of each gripping member preferably slopes in a direction toward the blade. In one non-limiting embodiment, the first layer preferably comprises three sub-layers, the second layer preferably comprises one sub-layer, the third layer preferably comprises one sub-layer, the fourth layer preferably comprises one sub-layer, and the fifth layer preferably comprises three sub-layers. In another non-limiting embodiment the first layer preferably comprises three sub-layers, the second layer preferably comprises one sub-layer, the third layer preferably comprises three sub-layers, the fourth layer preferably comprises one sub-layer, and the fifth layer preferably comprises three sub-layers. The first layer, the third layer, and the fifth layer are preferably constructed from a generally soft or flexible material. For example, the first layer, the third layer, and the fifth layer may be constructed from any of the following materials: wood, plastic, graphite, carbon fiber, and the like so that each of the layers is sufficiently flexible in order to improve the touch and feel of the paddle as experienced by the player. Moreover, the first layer, the third layer, and the fifth layer may be constructed from any combination of the abovelisted materials. It should be understood and appreciated that the first layer, the third layer, and the fifth layer of the paddle may be constructed from any preferably flexible and/or soft material without limiting the scope of the present invention. The second layer and the fourth layer are preferably constructed from a generally hard or sturdy material. For example, the second layer and the fourth layer may be constructed from one of the following materials: plastic, carbon fiber, graphite, other metals, and the like so that each of the layers is sufficiently sturdy in order to improve the consistency on the whole face of the paddle as experienced by the player and to make the entire face of the paddle a "sweet spot." Moreover, the second and fourth layer may be constructed from any combination of the above-listed materials. It should be understood and appreciated that the second layer and the fourth layer of the paddle may be constructed from any preferably sturdy, durable, and/or generally hard material without limiting the scope of the present invention. It should also be understood that generally the first layer, the third layer, and the fifth layer are constructed from a material that is softer than the material used to construct the second layer and the fourth layer. A ribbon or tape is preferably coupled along at least a portion of the circumference of the blade. The tape is preferably replaceable and/or customizable. The handle of the paddle preferably comprises an aperture for receiving an insert member. The insert member is preferably replaceable and/or customizable.

[0027] In a second non-limiting aspect of the invention, a paddle for use during the play of any racket or paddle sport but preferably table tennis is provided and includes: a blade having a head, and a handle extending from the head. The blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and fifth layer coupled to the fourth layer. The first layer preferably comprises three sub-layers each constructed from a flexible material, the second layer preferably comprises one sub-layer constructed from a sturdy material, the third layer preferably comprises one sub-layer constructed from a flexible material, the fourth layer preferably comprises one sub-layer constructed from a sturdy material, and the fifth layer preferably comprises three sub-layers each constructed from a flexible material.

[0028] It should be understood that the first layer, the third layer, and fifth layer of the second non-limiting aspect of the invention may be constructed from the same or similar materials as provided above with respect to the first layer, the third layer, and the fifth layer of the first non-limiting aspect of the invention. Moreover, it should be understood that the second layer and the fourth layer of the second non-limiting aspect of the invention may be constructed from the same or similar materials as provided above with respect to the second layer and the fourth layer of the first non-limiting aspect of the invention.

[0029] In a third non-limiting aspect of the invention, a paddle for use during the play of any racket or paddle sport but preferably table tennis is provided and includes: a blade having a head and a handle extending from the head. The blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer. The first layer preferably comprises three sublayers each constructed from a flexible material, the second layer preferably comprises one sub-layer constructed from a sturdy material, the third layer preferably comprises three sub-layers each constructed from a flexible material, the fourth layer preferably comprises one sub-layer constructed from a sturdy material, and the fifth layer preferably comprises three sub-layers each constructed from a flexible material.

[0030] It should be understood that the first layer, the third layer, and fifth layer of the third non-limiting aspect of the invention may be constructed from the same or similar materials as provided above with respect to the first layer, the third layer, and the fifth layer of the first non-limiting aspect of the invention. Moreover, it should be understood that the second layer and the fourth layer of the third non-limiting aspect of the invention may be constructed from the same or similar materials as provided above with respect to the second layer and the fourth layer of the first non-limiting aspect of the invention.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0031] A further understanding of the present invention can be obtained by reference to preferred embodiments set forth in the illustrations of the accompanying drawings. Although the illustrated embodiments are merely exemplary of systems for carrying out the present invention, both the organization and method of operation of the invention, in general, together with further objectives and advantages thereof, may be more easily understood by reference to the drawings and the following description. The drawings are not intended to limit the scope of this invention, which is set forth with particularity in the claims as appended or as subsequently amended, but merely to clarify, and exemplify the invention.

[0032] For a more complete understanding of the present invention, reference is now made to the following figures in which:

[0033] FIG. 1 illustrates a perspective view of one embodiment of the paddle in accordance with the present invention.

[0034] FIG. 2 illustrates a front view of the paddle of FIG. 1 in accordance with the present invention.

[0035] FIG. 3 illustrates a cross sectional view of the paddle of FIG. 1 in accordance with the present invention.

[0036] FIG. 4 illustrates a cross sectional view of a second embodiment of the paddle of FIG. 1 in accordance with the present invention.

[0037] FIG. 5 illustrates a perspective view of the paddle of FIG. 1 in accordance with the present invention.

[0038] FIG. 6 illustrates a side view of the paddle of FIG. 1 in accordance with the present invention.

### DETAILED DESCRIPTION OF THE INVENTION

[0039] The invention may be understood more readily by reference to the following detailed description of preferred embodiment of the invention. However, techniques, systems, and operating structures in accordance with the invention may be embodied in a wide variety of forms and modes, some of which may be quite different from those in the disclosed embodiment. Consequently, the specific structural and functional details disclosed herein are merely representative, yet in that regard, they are deemed to afford the best embodiment for purposes of disclosure and to provide a basis for the claims herein, which define the scope of the invention. It must be noted that, as used in the specification and the appended claims, the singular forms "a", "an", and "the" include plural referents unless the context clearly indicates otherwise. It should also be noted that the words "racket" and "paddle" may be used interchangeably throughout. Finally, it should be noted that the words "user" and "player" may be used interchangeably throughout.

[0040] The paddle of the present invention is generally to be used for the sport of table tennis (sometimes referred to as ping-pong). However, it should be understood and appreciated that all of the disclosed features and designs can be implemented into any paddle or racket used for any sport requiring a paddle or racket, without limiting the scope of the present invention.

[0041] The paddle of the present invention provides several features and serves many purposes. For example, the table tennis paddle of the present invention makes it easier and more exciting for all players. As another example, the paddle of the present invention makes it significantly easier for beginners to learn to play table tennis and carry on a game or rally, and provides advanced, expert, and/or intermediate players with the ability to have longer rallies and hit harder shots with increased control.

[0042] The paddle of the present invention has a specific design type, which will be discussed thoroughly with respect to FIGS. 1-6 below that makes it perform differently than other paddles.

[0043] One aspect of an embodiment of the invention is to provide a useful and novel paddle that is strong and durable yet flexible. This is generally done by providing a paddle with a blade that comprises a plurality of layers. These layers may be constructed from different materials to create the desired strength and flexibility of the paddle.

[0044] Another aspect of an embodiment is to provide a useful and novel table tennis paddle that makes the entire playing surface or face of the paddle the "sweet spot," meaning the ball can hit anywhere on the playing surface of the paddle and the resulting shot will always feel the same to the player and the improved "sweet spot" allows for a larger margin of error on the player's part, which minimizes errant shots. Thus, giving beginners more room for error and intermediate, advanced, and/or expert players the ability to make better shots with more power and control.

[0045] Referring now to the drawings, wherein like numerals indicate like elements throughout, FIG. 1 illustrates a perspective view of one embodiment of a paddle 100 in accordance with the present invention. With respect to FIG. 1 there is shown a paddle 100, which includes a blade 102. Blade 102 is preferably comprised of a plurality of pre-cut, one-piece layers (not shown). However, it should be understood that the layers do not have to be a single piece and may be comprised of several pieces coupled or connected together, without limiting the scope of the present invention. As will be discussed below with respect to FIGS. 3 and 4, each layer is constructed from a particular material, which serves to create a strong and durable, yet flexible paddle. Moreover, each layer of blade 102 preferably comprises a head or head portion 104 and a handle or handle portion 106 that extends from head portion 104. Again, it should be understand that head portion 104 and handle portion 106 of each layer may be two separate pieces that are coupled together, without limiting the scope of the present invention. Head portion 104 is generally an oval shape and handle portion 106, which extends from head portion 104, is generally rectangular in shape and is generally narrower than head portion 104. Blade 102 further contains playing surface or face 108, which is preferably coupled to the outer surface (not shown) of blade 102. Blade 102 preferably comprises a second outer surface (not shown) and a second playing surface or face (not shown) coupled to the second outer surface (not shown) on the opposing side of blade 102. Playing surface 108 is preferably coupled to outer surface (not shown) using any commonly known adhesive. However, it should be understood that any method for coupling playing surface 108 to outer surface (not shown) may be implemented without limiting the scope of the present invention.

[0046] Paddle 100 also features a face to handle ratio and neck orientation, which make paddle 100 more flexible and easier to hold. For example, head portion 104 preferably extends down further to create this effect. For example, as shown in FIG. 1, blade 102 comprises two curvatures 110 and 112 that extend from the bottom of head portion 104 and into the top of handle portion 106. Curvatures 110 and 112 generally curve towards one another and serve to narrow the bottom of head portion 104 in order to form the top of handle portion 106.

[0047] Referring to FIG. 2, illustrated is a front view of paddle 100 in accordance with the present invention. Paddle

100 preferably comprises a playing surface or face 202 which is coupled to the first outer surface (not shown) of blade 102. As discussed above, blade 102 comprises head portion 104. At its longest (from tip of head portion 204 to bottom of head portion 206), head portion 104 is preferably 7 inches long. At its widest (from left-most part 208 of head portion to right-most part 210 of head portion), head portion 104 is preferably 6.5 inches wide. These dimensions provide face 202 with a large surface area to hit the ball, thus making it easier for the player to play table tennis. Larger face 202 also allows a player to have longer rallies and hit harder shots with increased control.

[0048] Also depicted in FIG. 2 is handle portion 106. As discussed above, handle portion 106 preferably extends from head portion 104. Handle portion 106 is preferably available in lengths ranging from about 4 inches to about 6 inches including but not limited to 4 inches, 4½18 inches, 4½18 inches, 4<sup>3</sup>/<sub>18</sub> inches, 4<sup>4</sup>/<sub>18</sub> inches, 4<sup>5</sup>/<sub>18</sub> inches, 4<sup>6</sup>/<sub>18</sub> inches, 4<sup>7</sup>/<sub>18</sub> inches, 48/18 inches, 49/18 inches, 410/18 inches, 411/18 inches, 412/18 inches, 413/18 inches, 414/18 inches, 415/18 inches, 416/18 inches,  $4^{17}/_{18}$  inches, 5 inches,  $5^{1}/_{18}$  inches,  $5^{2}/_{18}$  inches,  $5^{3}/_{18}$  inches, 54/18 inches, 55/18 inches, 56/18 inches, 57/18 inches, 58/18 inches, 5%18 inches, 51%18 inches, 511/18 inches, 512/18 inches, 513/18 inches, 514/18 inches, 515/18 inches, 516/18 inches, 517/18 inches, and 6 inches. It should be understood and appreciated that the length of handle portion 106 can be any appropriate length, even outside the range listed above, without limiting the scope of the present invention. These different lengths allow players to pick a paddle with a handle that is perfect for them and allow a player to use paddle 100 to use shots not before seen in the sport. For example, in table tennis, with a longer handle the player may be able to use a two-handed backhand.

[0049] Handle portion 106 further preferably comprises a first gripping member 212, which is coupled to the first outer surface (not shown) of handle portion 106. Handle portion 106 also preferably comprises a second gripping member (not shown), which is coupled to the second outer surface or opposed outer surface (not shown) of handle portion 106. Gripping members 212 and (not shown) are not part of the layers of blade 102, which will be discussed in more detail with respect to FIGS. 3 and 4. Gripping member 212 and gripping member (not shown) are essentially identical in configuration and therefore the description of gripping member 212 applies equally to gripping member (not shown). As such, the discussion will be limited to gripping member 212, however it should understood that the disclosure applies equally to gripping member (not shown). Gripping member 212 is preferably constructed from wood; however, it may be constructed from any appropriate material without limiting the scope of the present invention. As shown in FIG. 2, gripping member 212 preferably is the same length and general shape as handle portion 106. Gripping member 212 also preferably comprises a sloped portion 214 located at the upper or top section of gripping member 212 (part closest to face 202). Sloped portion 214 slopes in a downward direction towards blade 102 and makes paddle 100 easier to hold and maneuver. Gripping portions 212 and (not shown) are preferably coupled to the each respective outer surface (not shown) of handle portion 106 using any commonly known adhesive. However, it should be understood that any method for coupling gripping portions 212 and (not shown) to the outer surfaces (not shown) of handle portion 106 may be implemented without limiting the scope of the present invention. Moreover, it should be understood that gripping members 212 and (not shown) and handle portion 106 may be a single piece, without limiting the scope of the present invention. Handle portion 106 and gripping members 212 and (not shown) may be straight and/or flared. Moreover, handle portion 106 may also feature a leather wrap or other alternative designs without limiting the scope of the present invention.

[0050] Gripping member 212 also preferably comprises an aperture or inset window 216. Inset window 216 is preferably in the shape of an oval, however it should be appreciated that inset window may be any appropriate shape without limiting the scope of the present invention. Moreover, a graphic or insert member 218 may be inserted into inset window 216 to provide a graphic or design of the player's choosing to paddle 100. Graphic 218 may be inserted into either or both gripping members so that a graphic or design may appear on each side or both sides of paddle 100. Graphic 218 is preferably customizable. For example, graphic 218 may be any of the following: a picture, a design, a painting, a symbol, a graphic, an icon, words, and the like. It should be understood that graphic 218 may be any type of design without limiting the scope of the present invention. Moreover, graphic 218 is preferably replaceable, which allows a user to replace graphic 218 with another graphic at any desired time.

[0051] Referring to FIG. 3, illustrated is a cross sectional view of paddle 100 in accordance with the present invention. Paddle 100 features a blade 102. With respect to FIG. 3, it is shown that blade 102 preferably comprises 5 layers: a first layer 302, a second layer 304, a third layer 306, a fourth layer 308, and a fifth layer 310. First layer 302 preferably comprises three sub-layers 302a, 302b, 302c each of which are preferably constructed from wood. However, as described above, first layer 302 and sub-layers 302a, 302b, 302c may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. Second layer 304 preferably comprises one sub-layer 304a preferably constructed from carbon fiber. Again, second layer 304 and sub-layer 304a may be constructed from any generally sturdy material, including, among other materials, the materials disclosed above. Third layer 306 preferably comprises one sublayer 306a preferably constructed from wood. Third layer 306 and sub-layer 306a may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. Fourth layer 308 preferably comprises one sub-layer 308a preferably constructed from carbon fiber. Once again, fourth layer 308 and sub-layer 308a may be constructed from any generally sturdy material, including, among other materials, the materials disclosed above. Fifth layer 310 preferably comprises three sub-layers 310a, 310b, 310c, each of which are preferably constructed from wood. However, as described above, fifth layer 310 and sub-layers 310a, 310b, 310c may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. This setup is generally referred as the 3-1-1-3 configuration and gives paddle 100 the strength and durability of the carbon fiber without sacrificing the flexibility and give of the wood. Blade 102 makes the entire face 202 of paddle 100 the "sweet spot." For example, most, if not all shots hit on face 202 of paddle 100 will feel the same to the player. This gives beginners more room for error and intermediate, advanced and/or expert players the ability to make better shorts with more power and increased control.

[0052] Referring to FIG. 4 illustrated is a cross sectional view of a second embodiment of paddle 100 in accordance with the present invention. Paddle 100 features blade 102.

With respect to FIG. 4, it is shown that blade 102 preferably comprises 5 layers: a first layer 402, a second layer 404, a third layer 406, a fourth layer 408, and a fifth layer 410. First layer 402 preferably comprises three sub-layers 402a, 402b, 402c, each of which is preferably constructed from wood. However, as described above, first layer 402 and sub-layers 402a, 402b, 402c may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. Second layer 404 preferably comprises one sub-layer 404a preferably constructed from carbon fiber. Again, second layer 404 and sub-layer 404a may be constructed from any generally sturdy material, including, among other materials, the materials disclosed above. Third layer 406 preferably comprises three sub-layers 406a, 406b, **406**c, each of which is preferably constructed from wood. Third layer 406 and sub-layers 406a, 406b, 406c may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. Fourth layer 408 preferably comprises one sub-layer 408a preferably constructed from carbon fiber. Once again, fourth layer 408 and sub-layer 408a may be constructed from any generally sturdy material, including, among other materials, the materials disclosed above. Fifth layer 410 preferably comprises three sub-layers 410a, 410b, 410c, each of which is preferably constructed from wood. However, as described above, fifth layer 410 and sub-layers 410a, 410b, 410c may be constructed from any generally flexible material, including, among other materials, the materials disclosed above. This setup is generally referred as the 3-1-3-1-3 configuration and gives paddle 100 the strength and durability of the carbon fiber without sacrificing the flexibility and give of the wood. Blade 102 makes the entire face 202 of paddle 100 the "sweet spot." For example, most, if not all shots hit on face 202 of paddle 100 will feel the same to the player. This gives beginners more room for error and intermediate, advanced and/or expert players the ability to make better shorts with more power and increased control.

[0053] With respect to FIGS. 3 and 4, all the layers are preferably connected to each other through the use of an adhesive, such as glue. However, it should be understood that any method of coupling the layers of FIGS. 3 and 4 may be implemented without limiting the scope of the present invention. Moreover, while two specific configurations of blade 102 have been disclosed with respect to FIGS. 3 and 4, it should be appreciated that any number of configurations of blade 102 may be implemented without limiting the scope of the present invention. Such configurations may include, but are not limited to the following: 1-1-1-1, 2-2-2-2, 1-1-2-1-1, 1-1-3-1-1, 1-2-1-2-1, 3-1-3-1-3, 2-1-2-1-2, 3-1-2-1-3, 3-1-1-3, 3-2-3-2-3, 3-3-3-3. Also, while it was disclosed that the layers may be constructed from wood and/or carbon fiber, it should be understood and appreciated that the layers may be constructed from any appropriate material that may provide strength, durability, and/or flexibility to paddle 100. Such sturdy and/or flexible materials may consist of, but are not limited to the following: alternate woods, alternate core materials (for example, graphite, or other metals), and the like. Specifically, the first layer, the third layer, and the fifth layer are preferably constructed from a generally soft material. For example, the first layer, the third layer, and the fifth layer may be constructed from one of the following materials: wood, plastic, graphite, carbon fiber, and the like. Moreover, the first layer, the third layer, and the fifth layer may be constructed from any combination of the above-listed materials. It should be understood and appreciated that the first layer, the third layer, and the fifth layer of the paddle may be constructed from any preferably flexible and/or soft material without limiting the scope of the present invention. The second layer and the fourth layer are preferably constructed from a generally hard material. For example, the second layer and the fourth layer may be constructed from one of the following materials: plastic, carbon fiber, graphite, other metals, and the like. Moreover, the second and fourth layer may be constructed from any combination of the above-listed materials. It should be understood and appreciated that the second layer and the fourth layer of the paddle may be constructed from any preferably sturdy, durable, and/or generally hard material without limiting the scope of the present invention. It should also be understand that generally the first layer, the third layer, and the fifth layer are constructed from a material that is generally softer than the material used to construct the second layer and the fourth layer.

[0054] Moreover, while two 5 layer configurations of blade 102 were disclosed with respect to FIGS. 3 and 4, it should be understood and appreciated that blade 102 may be comprised of three layers, whereby the first layer and the third layer (the outer layers) are preferably constructed from one of the generally soft materials discussed above, and the second layer (the middle layer) is preferably constructed from one of the hard materials. Again, any combination of configurations of the individual layers may be implemented in this embodiment without limiting the scope of the present invention. Also, blade 102 may be comprised of more than 5 layers.

[0055] Referring now to FIG. 5, illustrated is paddle 100 shown with playing surface or face 202 pealed down. Face 202 is preferably constructed from sandpaper of 150 grit. This sandpaper grit does not quickly wear down the ball yet holds the ball long enough to give players a chance to aim shots and place the ball in a specific area on the other side of the net. Face 202 of the paddle is preferably end-user replaceable. That is, if so desired, a user can simply peal face 202 from the outer surface 502 of paddle 100 and replace it with a new face. Face 202 is preferably coupled to outer surface 502 of paddle 100 via an adhesive, such as glue. However, any appropriate method for coupling face 202 to outer surface 502 of paddle that allows a user to replace face 202 may be implemented without limiting the scope of the present invention. Face 202 and any other replaceable face used with paddle 100 can also be customizable. For example, face 202 may feature design(s) 504 such as painted designs, pictures, symbols, words, icons, and the like. Design(s) 504 may be painted on face 202. However, it should be understood that design(s) 504 may be screened, printed, coupled via an adhesive, or added by any other method to face 202, without limiting the scope of the present invention. Face 202 may comprise any design without limiting the scope of the present invention. It should also be understand that face 202 may be constructed from any number of materials without limiting the scope of the present invention. Such materials may consist of, but are not limited to the following: rubber, sponge, carbon fiber, sand, diamond dust, plastic, different grit sandpaper, and the like.

[0056] While FIG. 5 only illustrates one side of paddle 100, it should be understood that a replaceable and/or customizable playing surface or face 202 as described above may be coupled to a second, opposing outer surface (not shown) of paddle 100 in a similar manner. As such, the above disclosure

with respect to outer surface 502, design(s) 504, and face 202 applies equally to the second, opposing outer surface (not shown) of paddle 100.

[0057] Referring now to FIG. 6, illustrated is a side view of paddle 100 of the present invention. Blade 102 preferably comprises a side surface 602 around its circumference. Coupled around the circumference or side surface 602 of blade 102 is preferably a tape or ribbon 604. Tape 604 is preferably customizable. For example, Tape 604 may comprise a design 606, such as, but not limited to, a painting, words, a picture(s), a symbol(s), an icon(s), and the like. Preferably, design 606 may contain any type of design without limiting the scope of the present invention. Tape 604 is preferably coupled to side surface 602 via an adhesive such as glue so that a user may easily replace tape 604 as desired. However, any appropriate method for coupling tape 604 to side surface 602 of blade 102 that allows a user to readily replace tape 604 may be implemented without limiting the scope of the present invention.

[0058] As previously discussed, the face of paddle 100 is user-replaceable. Players or users will be able to remove whatever the face material is, sandpaper for example, and replace it with a new sheet of sandpaper cut to the correct size of blade 102 using the same design elements referred to herein. This user replaceable technology will also be available from can be implemented for any other paddle and is not limited to the paddle disclosed herein. Furthermore, the face of these paddles will also feature the first ever paintable and designed paddle faces. Players or users will be able to have designs put onto the face either by painting, or any number of other manufacturing processes, for example, by screening, printing, via adhesive, and the like. These designs will either be available via new paddles that are already designed or through new sheets of the user-replaceable face to make it easier for players to customize their rackets or paddles. Furthermore, players will have the ability to replace the face, the tape, and the window inserts of the paddle.

[0059] Many variations of the paddle of the present invention will occur including but not limited to: alternative woods, alternative core materials (for example, metals), different face materials (potential for rubber, sponge, carbon fiber, sand, diamond dust, plastic, different grit sandpaper and a number of other materials), different face designs, different face shapes, different handle lengths, different handle widths, different handle designs and shapes, new colors, and design elements, new types of outside tape (including materials or design), different shapes and designs for the inset window, and different handle materials.

[0060] Moreover, it should be understood that this invention is not limited to the disclosed features and other similar method and system may be utilized without departing from the spirit and the scope of the invention.

[0061] While the invention has been described with reference to the preferred embodiment and alternative embodiments, which embodiments have been set forth in considerable detail for the purposes of making a complete disclosure of the invention, such embodiments are merely exemplary and are not intended to be limiting or represent an exhaustive enumeration of all aspects of the invention. The scope of the invention, therefore, shall be defined solely by the following claims. Further, it will be apparent to those of skill in the art that numerous changes may be made in such details without departing from the spirit and the principles of the invention. It

should be appreciated that the invention is capable of being embodied in other forms without departing from its essential characteristics.

What is claimed is:

- 1. A paddle comprising:
- a blade having:
  - a head, and
  - a handle extending from the head,
- wherein the blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer.
- 2. The paddle as claimed in claim 1 wherein the blade comprises a first outer surface on one side of the blade and a second outer surface on the opposing side of the blade.
- 3. The paddle as claimed in claim 2 wherein at least one playing surface is coupled to at least the first outer surface or the second outer surface.
- **4.** The paddle as claimed in claim **3** wherein the at least one playing surface is replaceable.
- 5. The paddle as claimed in claim 3 wherein the at least one playing surface is customizable.
- 6. The paddle as claimed in claim 3 wherein the at least one playing surface is constructed from a material selected from the group consisting of: sandpaper, rubber, sponge, carbon fiber, sand, diamond dust, plastic, and combinations thereof.
- 7. The paddle as claimed in claim 1 and further comprising two gripping members coupled to opposing sides of the handle, each gripping member having a proximal end located in close proximity to the head and an opposing distal end.
- 8. The paddle as claimed in claim 7 wherein the proximal end of each gripping member slopes in a direction toward the blade
- **9**. The paddle as claimed in claim **1** wherein the first layer comprises three sub-layers, the second layer comprises one sub-layer, the third layer comprises one sub-layer, the fourth layer comprises one sub-layer, and the fifth layer comprises three sub-layers.
- 10. The paddle as claimed in claim 1 wherein the first layer comprises three sub-layers, the second layer comprises one sub-layer, the third layer comprises three sub-layers, the fourth layer comprises one sub-layer, and the fifth layer comprises three sub-layers.
- 11. The paddle as claimed in claim 1 wherein the first layer, the third layer, and the fifth layer are constructed from a material selected from the group consisting of: wood, plastic, graphite, carbon fiber, and combinations thereof.
- 12. The paddle as claimed in claim 1 wherein the second layer and the fourth layer are constructed from a material selected from the group consisting of: plastic, carbon fiber, graphite, and combinations thereof.
- 13. The paddle as claimed in claim 1 and further comprising a tape coupled along at least a portion of the circumference of the blade.
- 14. The paddle as claimed in claim 13 wherein the tape is replaceable.
- 15. The paddle as claimed in claim 13 wherein the tape is customizable.
- **16**. The paddle as claimed in claim **1** wherein the handle comprises an aperture for receiving an insert member.
- 17. The paddle as claimed in claim 16 wherein the insert member is replaceable.
- 18. The paddle as claimed in claim 16 wherein the insert member is customizable.

### 19. A paddle comprising:

a blade having:

a head, and

a handle extending from the head,

wherein the blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer, and

wherein the first layer comprises three sub-layers, the second layer comprises one sub-layer, the third layer comprises one sub-layer, the fourth layer comprises one sub-layer, and the fifth layer comprises three sub-layers. 20. A paddle comprising:

a blade having:

a head, and

a handle extending from the head,

wherein the blade comprises a first layer, a second layer coupled to the first layer, a third layer coupled to the second layer, a fourth layer coupled to the third layer, and a fifth layer coupled to the fourth layer, and

wherein the first layer comprises three sub-layers, the second layer comprises one sub-layer, the third layer comprises three sub-layers, the fourth layer comprises one sub-layer, and the fifth layer comprises three sub-layers.

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